



HEALTHY PRODUCTS

Far Infrared Therapy *Capturing the Therapeutic Benefits of Solar Energy*

Millions of Americans endure the daily aches and discomforts of health conditions like arthritis, muscle tension, and sprains and strains, especially in the back, shoulder, and neck.

Over-the-counter pain remedies offer some relief, but carry a high risk of gastrointestinal upset and other side effects.

Now, a novel heating device captures the healing **far infrared** rays of the sun to provide safe, soothing relief of pain, stiffness, and tension—in the convenience of your home.

The Healing Power of Light

The sun doesn't just provide light for us to see by. That same light becomes energy that living things use to thrive and grow. Humans absorb the sun's rays through the skin and eyes, and the sun helps stimulate the metabolism.¹ Without light, our bodies cannot properly absorb certain nutrients. Suppressed immune function, fatigue, depression, sleep disorders, and other ailments may be other consequences of a lack of sufficient exposure.²⁻⁴

Aside from what we can see (visible light), a large portion of the sun's energy is in the invisible, infrared part of the spectrum. In 1800, English astronomer Sir William Herschel experimented with putting a thermometer at

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various points in a prismatic spectrum.⁵ He found that ordinary light transmits some heat, but the effect is even more marked beyond the red end of the spectrum, in the *far infrared* band.⁶ Unlike high-frequency ultraviolet rays, which can provoke sunburn or cancerous changes in the skin, *far infrared* rays do not damage the skin. *Far infrared* can, therefore, help us derive some of the benefits of sunshine—even when we don't have regular access to it.

Far infrared and its therapeutic properties have been studied in China and Japan for over 30 years. Researchers have found *far infrared* can be helpful for enhancing blood circulation, reducing pain, strengthening the cardiovascular system, easing joint stiffness and inflammation, and revitalizing skin cells.⁷⁻¹³

Going way beyond the old heat lamps, there are now products available like infrared saunas, mineral lamps, as well as knee, ankle, and elbow wraps. Many of these products are enhanced with *far infrared*-emitting elements composed of oxides of zirconium, aluminum, zinc, titanium, and antimony. These products have been undergoing extensive inves-

tigation for their ability to retain body heat and emit safe *far infrared* rays that penetrate deep into joints and surrounding tissues.

Research Confirms Diverse Healing Effects of Far Infrared Light

A growing body of clinical evidence supports the use of *far infrared* as a non-invasive health-promoting therapy. As far back as 1989, researchers found convincing evidence that when *far infrared* was applied to local areas or to the entire body, it had a sleep-modulatory effect on patients suffering from insomnia. Additionally, *far infrared* therapy produced a blood circulation-enhancing effect in human skin. Questionnaires to more than 500 users of *far infrared* devices revealed that the majority reported an overall improvement in health. The effects appeared to be triggered by *far infrared*-induced increase in body tissue temperature, as well as enhanced blood circulation in human skin.⁷

More recent studies in China explored *far infrared* therapy as a method to improve inadequate blood circulation in patients with vascular access malfunction, a leading cause of morbidity and mortality in hemodialysis patients. Study subjects treated with *far infrared* showed measurable blood flow improvement after a single session. Test results were consistent after one year of therapy.⁸

A similar study on laboratory rats found that treatment with *far infrared* could help reduce the prevalence of ischemia (shortage

of the blood supply to an organ) and ischemic diseases.¹⁴ In cases of trauma, reconstructive surgery, and diabetes, insufficient microcirculation in skin can lead to acute tissue ischemia. The study found that *far infrared* therapy produced a significant increase in skin microcirculation in the treated animals.

The benefits of *far infrared* extend to the cardiovascular system as well. Repeated *far infrared* therapy has also been shown to improve impaired vascular endothelial function in patients with atherosclerosis and other coronary risk factors.^{15,16}

A Japanese study tested the effects of *far infrared* rays on chronic pain. The investigators studied *far infrared* efficacy in patients suffering from fibromyalgia, a condition characterized by sleep disturbances and widespread pain with tenderness in specific areas.¹⁷ Thirteen female patients received *far infrared* therapy once per day for two or five days per week. All of the patients experienced a significant reduction in pain (by about half) after the first session. The effects of treatment became stable after 10 sessions, with participants experiencing up to a 78% reduction in their pain.

Another study backed up these findings, suggesting that an approach of multidisciplinary treatment that included *far infrared* therapy could be a promising method for treating chronic pain.⁹

Patients suffering from chronic inflammation have been the subject of a variety of tests utilizing *far infrared* treatment. A recent study in Taiwan¹⁰ found that *far infrared* radiation exerts a potent anti-



The possible health benefits of far infrared treatment for arthritis are also the subject of ongoing promising research.

inflammatory effect via induction of heme oxygenase-1, an enzyme that confers cellular protection against oxidative stress.¹⁸ The possible benefits of *far infrared* treatment for arthritis, a disorder associated with chronic inflammation, are also the subject of ongoing promising research. A Chinese study found that infrared radiation exerts anti-inflammatory effects by inhibiting the release of the inflammatory chemokine interleukin-8. Researchers believe a fuller understanding of the process could serve as the basis for improved treatment of rheumatoid arthritis patients.¹⁹

Bringing Home the Benefits of Far Infrared Light

Most people are familiar with the infrared heat lamps used in some bathrooms. *Far infrared* produces heat by similar means, but is more efficient because it penetrates deeper into the skin. It makes sense to target specific areas of the skin and body in order to promote better absorption of *far infrared* rays. Now, *far infrared* heating pads are available to provide convenient access to soothing infrared therapy, offering relief in particular to arthritis sufferers and those who battle with other types of chronic pain.

Far infrared heating pads are dramatically different from the heating pads available at the corner drugstore. Traditional heating pads work from the outside in. When you remove a typical heating pad, the therapeutic value quickly goes away. In contrast, *far infrared* penetrates through the skin and insulating layer of fat, two to three inches into the body, producing a warming effect from the inside out. *Far infrared* penetrates quicker and provides a faster response

in the body, and its warming benefits continue after use.

Why heat? *Far infrared* raises the body's surface temperature. Heat helps increase circulation, which may benefit people who suffer from circulatory issues. Infrared heat increases surface blood flow without increasing blood pressure, by promoting dilation of the blood vessels.

A further benefit of heat is improved flexibility. Older individuals in particular can lose elasticity of muscle fibers and connective tissue due to lack of regular exercise. Warming up the muscle and connective tissue can help it become more pliable, restoring its elasticity.

The benefits of infrared heat may be further enhanced by natural jade stone. Jade is the most efficient natural infrared heat absorber of all the semiprecious stones. When run through jade, *far infrared* passes its heat smoothly to the body. It also creates negative ions, which is a further benefit. Our bodies are positively charged, and introducing the body to a negative ion environment (such as that found at the ocean side) is calming and soothing.

Summary

Living things require sunlight in order to grow and thrive. *Far infrared* light, the safest segment of energy that comes from the sun, offers a wide array of therapeutic benefits for various health conditions. Studies demonstrate that *far infrared* helps enhance circulation in the skin, modulate sleep, ease pain, protect against oxidative stress, and relieve inflammation. The benefits of *far infrared* therapy are enhanced by jade stone, which helps healing heat penetrate deeper while producing soothing



negative ions. Heating pads combining *far infrared* heat with jade stone are now available to provide convenient at-home relief for individuals seeking to increase flexibility, relieve discomfort, boost circulation, and relieve stress and fatigue. ●

If you have any questions on the scientific content of this article, please call a Life Extension Health Advisor at 1-800-226-2370.

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