

The FIR Therapy Unit has provided pain relief for these conditions:

- Osteoarthritis
- Rheumatoid arthritis
- Adhesive capsulitis (frozen shoulder)
- Sciatica
- Fibromyalgia
- Plantar fasciitis
- Trigger finger
- Lower back pain
- Thoracic pain (upper/middle back pain)
- Carpal tunnel syndrome
- Minor muscle sprains and tears

Post orthopedic surgical care

- Reduced edema and bruising
- Provided pain relief
- Promoted wound healing

Sports medicine potential uses

- Sprains and strains
- Tendonitis
- Bursitis

Far-Infrared Therapy Unit

A scientifically-proven product for reducing inflammation



877-242-6922

fir@fir-us.com
www.fir-us.com



Far infrared therapy is an innovative, effective technology that is **scientifically proven** to enhance the benefits of physical therapy

Physiological impact

- Far Infrared (FIR) therapy inhibits the increase in inflammatory markers, working quickly to reduce inflammation.
- FIR therapy increases blood circulation and oxygen supply to damaged tissues aiding in the reduction of chronic joint and muscle pain or sport injuries.
- FIR therapy induces the release of nitric oxide, which signals surrounding smooth muscle to relax, thus dilating the arteries, increasing blood flow, and delivering oxygen and nutrients to cells in the body.

Physical therapy benefits

- Adds to the diversity of existing treatment modalities.
- Effective pain relief with minimal contraindication; non-invasive.
- Doesn't interfere with other electrical physiotherapy equipment or ultrasound.
- Low cost; no frequent consumables.



The Far Infrared (FIR) Therapy Unit emits far infrared rays that have none of the biologically-damaging effects associated with UV radiation. Far infrared rays produce therapeutic effects through thermal and non-thermal mechanisms such as promotion of anti-inflammatory pathways and increased levels of nitric oxide.

- ▶ **FIR's moderate temperature and low power density makes it very safe for users. No injuries or skin burn have been reported in the history of use for FIR therapy.**

The technology

The FIR Therapy Unit's technology for general physical therapy is a patented process made from a precision ceramic plate and a proprietary coating containing carbon that emit a gentle continuous range of far infrared rays that penetrate affective area to induce the body's own healing mechanisms.

Indications

Far infrared therapy is cleared by the FDA for temporarily increasing circulation and reducing pain, stiffness and muscle spasm. Therefore, any condition that would benefit from these indications may benefit from the effects of the FIR therapy unit.

Ease of use

The FIR Therapy Unit is easy to use. Patients receive treatment from the FIR Therapy Unit three times a week for 30 to 40 minutes. The FIR emitter is set ten inches above the surface of the area being treated (should be bare skin).

Effectiveness

Some patients feel pain relief in the first treatment, while others need more.

Safe and cost-effective

The emission elements of the FIR Therapy Unit are made from special ceramic and generate far-infrared electromagnetic waves of specific wavelengths that emit and penetrate the affected area to induce physiological improvements, including:

- Improving micro-circulation
- Facilitating tissue growth
- Inhibiting inflammation

The FIR emitter can be adjusted to use on any part of the body.



Clinical studies featuring the FIR Therapy Unit

"By inducing the expression of Heme Oxygenase-1, Far Infrared Therapy reduces monocyte adhesions in the endothelium cells and therefore reduces the inflammatory responses that cause further endothelial injury and dysfunction."

Far Infrared Therapy inhibits Vascular Endothelial Inflammation via the Induction of Heme Oxygenase-1. Lin et al, Arteriosclerosis Thrombosis Vascular Biology 2008 Apr; 28:739-45.

Selected other studies:

Far-Infrared Mitigates Vascular Endothelial Growth Factor-Induced Proliferation in Human Umbilical Vein Endothelial Cells via the Generation of Nitric Oxide and Reactive Oxygen Species (poster of Annual meeting of ASN 2008), Yung-Ho Hsu, Tso-Hsiao Chen, Chun-Cheng Hou, Yuh-Mou Sue, Cheng-Hsien Chen.

Biological Effect of Far-Infrared Therapy on Increasing Skin Microcirculation in Rats, Shi-Yau Yu et al, Photodermatology Photoimmunology & Photomedicine – 2006;22: 78-86.

Far-Infrared Therapy: A Novel Treatment to Improve Access Blood Flow and Unassisted Patency of Arteriovenous Fistula in Hemodialysis Patients, Lin et al – J Am Soc Nephrol 18: 985-992,2007.

