

Health Benefits of Far Infrared Therapy, Thermo Therapy, PEMF Therapy, Red Light and Negative Ion Therapy are extensively studied by doctors, scientists and research groups for more than fifty years. They have been proven to have healing effects and abilities to improve life quality in many health conditions.

PubMed is the main searchable database of U.S. National Library of Medicine (NLM) and the National Institutes of Health (NIH) with more than 27 million citations for biomedical literature from MEDLINE, life science journals, and online books. it is the main source for information about the newest health technologies, medicines and treatments researches and studies.

Almost all links below lead to PubMed, Medline or NASA articles and reports.

CRYSTAL RAYS HEALING POWER

Healing bio-resonance properties of Amethyst and other gemstones 4-16 microns FIR Rays have been reported by several scientific researches

<https://www.ncbi.nlm.nih.gov/pubmed/2689357>

<https://www.ncbi.nlm.nih.gov/pubmed/12053208>

FAR INFRARED AND HOT STONE THERAPY

Far-infrared therapy for cardiovascular, autoimmune, and other chronic health problems: A systematic review

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4935255/>

It showed that FIR physiotherapy, improves the health of patients with

- ischemia
- cardiovascular disease,
- diabetes mellitus,
- chronic kidney disease

Far-InfraRed Therapy was also found effective in

- relieving pain in patients with chronic pain
- eliminating chronic fatigue syndrome,
- relieving fibromyalgia
- repairing muscle damage
- soothing phantom limb pain after amputation
- treatment of depression in patients with insomnia by increasing serotonin levels

These studies have shown that FIR radiation produces several effects, such as increasing artery blood flow and peripheral blood circulation, improving endothelial function, alleviating fatigue and pain, reducing blood pressure, and promoting capillary dilatation

Far infrared radiation (FIR): its biological effects and medical applications

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3699878>

Basing on in-vitro study of lines of human cancer, it suggested that FIR irradiation may be used as an effective medical treatment for some cancer cells which have low levels of HSP70.

It showed that FIR physiotherapy helps in managing the discomfort of primary dysmenorrhea in female patients. FIR belts used in this study increased the local surface body temperature as well as the abdominal blood flow; in addition to reducing the pain and the discomfort from it. It also potentiated the effect of the topical agent in cellulite reduction.

Far-InfraRed Therapy was also found effective in

- wound healing quickening
- eliminating chronic and acute pain,
- improving immunity
- enhancing blood flow and microcirculation

Far infrared radiation (FIR): its biological effects and medical applications

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3699878>

FIR Heat for sweating and detoxification, elimination of Mercury and heavy metals removal

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3312275>

Infrared treatment of obesity and metabolic syndrome

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3583363>

Effects of far-infrared rays on myofascial neck pain, muscle spasms and stiffness

<https://www.ncbi.nlm.nih.gov/pubmed/24152215>

Back pain relief as one of the most exciting FIR therapy effect

<https://www.ncbi.nlm.nih.gov/pubmed/26409395>

Phantom limb pain treated by far infrared ray

<https://www.ncbi.nlm.nih.gov/pubmed/19964539/>

Chronic Lower Backache treatment with FIR Heat

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2539004>

The effects of repeated thermal therapy for patients with chronic pain

<https://www.ncbi.nlm.nih.gov/pubmed/16088266>

Effects of thermal therapy combining sauna therapy and underwater exercise in patients with fibromyalgia

<https://www.ncbi.nlm.nih.gov/pubmed/21742283>

Efficacy of Waon therapy for fibromyalgia

<https://www.ncbi.nlm.nih.gov/pubmed/18703857>

Improved foot sensitivity and pain reduction in patients with peripheral neuropathy after treatment with monochromatic infrared photo energy

<https://www.ncbi.nlm.nih.gov/pubmed/16504836>

Far-Infrared Therapy Promotes Nerve Repair for Sciatic Nerve Injury

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4333284>

The effects of repeated thermal therapy for two patients with chronic fatigue syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/15992574>

Far Infrared and Thermotherapy efficiency for chronic fatigue and tiredness

<https://www.ncbi.nlm.nih.gov/pubmed/17561703>

The effect on serotonin and MDA levels in depressed patients with insomnia when far-infrared rays are applied to acupoints

<https://www.ncbi.nlm.nih.gov/pubmed/19885944>

Moxibustion and Far Infrared Therapy in insomnia treatment

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4944240>

Moderate FIR Heating of abdominal area stimulates bowel movements and serotonin biosynthesis in the intestine and provides relief for Constipation

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3092738>

Moxibustion and FIR Heating stimulate serotonin and enzymes biosynthesis in the intestine effective to treat gastro-enteric problems

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3520423>

Far Infrared Heating for cardiovascular, autoimmune, toxicant- induced, pulmonary and other chronic health problems

<https://www.ncbi.nlm.nih.gov/pubmed/21951023>

Far-infrared therapy for cardiovascular and other chronic health problems: A systematic review.

<https://www.ncbi.nlm.nih.gov/pubmed/25716016>

Far-infrared heat for prevention of cardiovascular risk factors and heart disorders

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2718593>

Passive heat therapy improves endothelial function, arterial stiffness and blood pressure in sedentary humans

<https://www.ncbi.nlm.nih.gov/pubmed/27270841>

Effects of far-infrared heating on recovery from strength and endurance training sessions in men

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4493260>

Effects of Whole-Body Far-Infrared on Recovery from Exercise-Induced Muscle Damage in Highly-Trained Runners

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3233540>

Sport recovery with FIR treatment. Post-exercise muscle pain elimination

<https://www.ncbi.nlm.nih.gov/pubmed/27601783>

The effect of sauna and FIR therapy on lipid profile

<https://www.ncbi.nlm.nih.gov/pubmed/25001587>

FIR and Heat therapy for neuritis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4333284>

Infrared treatment for patients with arthritis and ankylosing spondylitis

<https://link.springer.com/article/10.1007%2Fs10067-008-0977-y>

Deep heating for dissolution of gout crystals. Far Infrared Heat should be able to treat joints naturally and non-intensive

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5131323>

The effects inhibiting the proliferation of cancer cells by far-infrared radiation (FIR) expression of heat shock proteins and immunity boost

<https://www.ncbi.nlm.nih.gov/pubmed/17968683>

Far-infrared radiation inhibits proliferation, migration, and angiogenesis of human umbilical vein endothelial cells and lessens the risk of angiogenesis-related diseases including cancer

<https://www.ncbi.nlm.nih.gov/pubmed/24334140>

Biological effects and medical applications of infrared radiation. IR can carry out photostimulation and photobiomodulation effects particularly benefiting neural stimulation, wound healing, and cancer treatment

<https://www.ncbi.nlm.nih.gov/pubmed/28441605>

The effects of repeated thermal therapy on quality of life in patients with type II diabetes mellitus

<https://www.ncbi.nlm.nih.gov/pubmed/20569036>

FIR heat to live better with diabetes mellitus

<https://www.ncbi.nlm.nih.gov/pubmed/20569036>

Improved sensitivity in patients with peripheral neuropathy: effects of monochromatic infrared photo energy

<https://www.ncbi.nlm.nih.gov/pubmed/15778471>

The restorative effects of pulsed infrared light therapy on significant loss of peripheral protective sensation in patients with long-term type 1 and type 2 diabetes mellitus

<https://www.ncbi.nlm.nih.gov/pubmed/16710647>

Effect of exposure to sauna heat on neuropathic and rheumatoid pain

<https://www.ncbi.nlm.nih.gov/pubmed/1375727>

Treatment of Thromboangiitis Obliterans and Lower limbs phlebitis with Far-infrared Therapy

<https://www.ncbi.nlm.nih.gov/pubmed/28759424>

Biological effect of far-infrared therapy on increasing skin microcirculation

<https://www.ncbi.nlm.nih.gov/pubmed/16606412>

The effectiveness of far-infrared therapy in circulation improvement. Study with hemodialysis patients with end-stage renal disease and arteriovenous fistula.

<https://www.ncbi.nlm.nih.gov/pubmed/25464959>

Far-infrared therapy improves access blood flow and unassisted patency of arteriovenous fistula in hemodialysis patients

<https://www.ncbi.nlm.nih.gov/pubmed/17267744>

Effects of Combined Far-Infrared Radiation on Peripheral Blood Perfusion and Autonomic Activities

<https://www.ncbi.nlm.nih.gov/pubmed/28883882>

Long-term antihypertensive effects of far-infrared ray (study on animals)

<https://www.ncbi.nlm.nih.gov/pubmed/26857237>

FIR Heat and Sauna procedures prevent colds

<https://www.ncbi.nlm.nih.gov/pubmed/2622833>

Far Infrared Therapy induced Heat Shock Protein treatment of influenza

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4908103>

**Clinical effects of far-infrared therapy in patients with allergic rhinitis, respiratory infections
physiotherapy**

<https://www.ncbi.nlm.nih.gov/pubmed/18002246>

Elevated body temperature benefits for antimicrobial treatment of Lyme disease

<https://www.ncbi.nlm.nih.gov/pubmed/8792482>

FIR heat protective properties against sunburns and related complications

<https://www.ncbi.nlm.nih.gov/pubmed/1610218>

PULSED ELECTROMAGNETIC THERAPY (PEMF)

general PUBMED search results for PEMF <https://www.ncbi.nlm.nih.gov/pmc/?term=PEMF>

Permanent Magnets in Medicine

<https://www.ncbi.nlm.nih.gov/pubmed/17618081>

Research of Migraine and Headache treatment with PEMF therapy

<https://www.ncbi.nlm.nih.gov/pubmed/17975726>

**Treatment of migraine with pulsing electromagnetic fields: a double-blind, placebo-controlled
study**

<https://www.ncbi.nlm.nih.gov/pubmed/11279973>

Studies for sciatic pain relieve and nerve regeneration showed efficiency of PEMF therapy

<https://www.ncbi.nlm.nih.gov/pubmed/25143937>

Pulsed electromagnetic fields stimulation enhances regeneration of the sciatic nerve

<https://www.ncbi.nlm.nih.gov/pubmed/8216387>

<https://www.ncbi.nlm.nih.gov/pubmed/2029930>

Neck pain treatment with PEMF

<https://www.ncbi.nlm.nih.gov/pubmed/19445809>

The effect of pulsed electromagnetic fields in the treatment of cervical osteoarthritis

<https://www.ncbi.nlm.nih.gov/pubmed/15986086>

Magnetic therapy of musculoskeletal chronic pain and fibromyalgia

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2670735>

Study of PEMF efficiency for low back pain treatment

<http://www.sciencedirect.com/science/article/pii/S2444866416300514>

Spine fusion for discogenic low back pain with PEMF

<https://www.ncbi.nlm.nih.gov/pubmed/11010056>

PEMF treatment of failed back surgery syndrome pain

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4317147>

PEMF therapy in back pain management and musculoskeletal disorders (MSDs)

<https://www.ncbi.nlm.nih.gov/pubmed/24564041>

Magnets for treatment of radicular pains

<https://www.ncbi.nlm.nih.gov/pubmed/17618081>

PEMF therapy in management of postoperative pain and edema, treatment of chronic wounds, and in facilitating vasodilatation and angiogenesis after Plastic Surgery

<https://www.ncbi.nlm.nih.gov/pubmed/19371845>

Pulsed electromagnetic fields (PEMFs) Mats for treatment of long-bone fracture and lumbar and cervical spine fusion surgery with lumbar muscle degeneration

<https://www.ncbi.nlm.nih.gov/pubmed/27282093>

Pulsed Electromagnetic fields therapy of osteoporosis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4482283>

PEMF for bones health, nerves, joints and tendons regeneration

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5365212>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2936347>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3556314>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3192716>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5043605>

Bones, joints stiffness and shoulders treatment with pulsed magnetic fields

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3791961>

Pulsed electromagnetic fields for knee osteoarthritis treatment

<https://www.ncbi.nlm.nih.gov/pubmed/26705327>

Prostate enlargement (prostate hyperplasia, swollen Prostate Gland) frequent urination and prostatitis treatment with pulsed magnetic therapy

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4145661>

PEMF therapy for pelvic pain and inflammation, menstrual pains relief and dysmenorrhea treatment

<https://www.ncbi.nlm.nih.gov/pubmed/7531030>

Extremely low frequency electromagnetic fields therapeutic effect in neurodegenerative diseases and multiple sclerosis

<https://www.ncbi.nlm.nih.gov/pubmed/28197174>

Study of PEMF treatment for some types of cancer

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5119968>

Treatment with low frequency pulsed electromagnetic field (PEMF) for patients with diabetic polyneuropathy and peripheral neuropathy

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812751>

<https://www.ncbi.nlm.nih.gov/pubmed/14635988>

<https://www.ncbi.nlm.nih.gov/pubmed/23637830>

Magnetic fields for regenerative medicine. The cell lends itself to a self-healing process if it receives specific information. Sexual Dysfunction PEMF therapy

<https://www.ncbi.nlm.nih.gov/pubmed/28702986>

Microcirculatory effects of pulsed electromagnetic field

<https://www.ncbi.nlm.nih.gov/pubmed/14656663>

Transcranial Low Voltage Pulsed Electromagnetic Fields in Patients with Treatment-Resistant Depression

[http://www.biologicalpsychiatryjournal.com/article/S0006-3223\(10\)00162-9/fulltext](http://www.biologicalpsychiatryjournal.com/article/S0006-3223(10)00162-9/fulltext)

BIO STIMULATION RED LIGHT THERAPY

Also known as LLLT (low level laser or low level light therapy), LILT (low intensity light therapy), photobiostimulation, biostimulation (BIOS), photobiomodulation, photonic stimulation or photorejuvenation

Monochromatic Red Light (light with the same wavelength) and Infrared Light Therapy share the same benefits.

Visible Red Light capable of penetrating the skin to a depth of about 8 to 10 mm is more efficient in these surface areas. Light energy is absorbed and converted into cellular energy, stimulating a whole series of metabolic events and body's natural processes on a cellular level to produce many benefits in the areas of anti-aging, wounds and injuries healing, and the pain relief.

- <https://www.ncbi.nlm.nih.gov/pubmed/?term=LLLT+OR+Low+level+laser+therapy+OR+Photobiomodulation+AND+circulation>

- <https://www.ncbi.nlm.nih.gov/pubmed/?term=LLLT+OR+Low+level+laser+therapy+OR+Photobiomodulation+AND+fibroblasts>
- <https://www.ncbi.nlm.nih.gov/pubmed/?term=LLLT+ATP+OR+LLLT+reactive+oxygen+species+OR+LLLT+oxidative+stress+OR+Photobiomodulation+ATP+OR+Photobiomodulation+reactive+oxygen+species+OR+Photobiomodulation+oxidative+stress>
- <https://www.ncbi.nlm.nih.gov/pubmed/?term=LLLT+tissue+granulation>
- <https://www.ncbi.nlm.nih.gov/pubmed/?term=lllt+inflammation+or+low-level+laser+inflammation+or+photobiomodulation+inflammation>

NASA and other scientists studies found in general searches above bring a lot of results about the following Red Light Therapy effects:

- Increased circulation and the formation of new capillaries
- Increased lymph system activity
- Increased production of collagen and fibroblasts
- Increased release of ATP, or raw cellular energy
- Increased phagocytosis, or cellular clean up
- Tissue granulation stimulated
- Nerves regeneration
- Inflammation reduced
- Post stroke recovery
- Anti-aging of skin promotion
- Treatment of acne, rosacea, eczema, psoriasis, cold sores and herpes, cuts, scrapes, burns and bruises

Below are the links to some articles with particular conditions researches.

NASA Light Technology Successfully Reduces Cancer Patients Painful Side Effects from Radiation and Chemotherapy

<https://www.nasa.gov/topics/nasalife/features/heals.html>

https://www.nasa.gov/centers/marshall/multimedia/photogallery/photos/photogallery/xssi/photo_led.html

https://www.nasa.gov/topics/nasalife/features/heals_photos.html

<https://www.nasa.gov/centers/marshall/news/news/releases/2003/03-199.html>

https://www.nasa.gov/home/hqnews/2003/nov/HQ_03366_clinical_trials.txt

Influence of the combination of infrared and red laser light on the healing of cutaneous wounds infected by Staphylococcus aureus

<https://www.ncbi.nlm.nih.gov/pubmed/21214389>

Analysis of the systemic effect of red and infrared laser therapy on wound repair

<https://www.ncbi.nlm.nih.gov/pubmed/19708798>

Low level light therapy by Red Light LEDs induces angiogenesis and improves ischemic wound healing

<https://www.ncbi.nlm.nih.gov/pubmed/2536344>

Photobiomodulation therapy promotes neurogenesis by improving post-stroke local microenvironment and stimulating neuroprogenitor cells

<https://www.ncbi.nlm.nih.gov/pubmed/29056360>

Significant Improvement in Cognition in Mild to Moderately Severe Dementia Cases Treated with Photobiomodulation

<https://www.ncbi.nlm.nih.gov/pubmed/28186867>

Research of effects of Bio Stimulation Red Light Therapy

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4126803>

Red Light Photobiomodulation in Retinal Injury and Soft tissue Disease

<https://www.ncbi.nlm.nih.gov/pubmed/26427443>

Red light low level laser therapy against wrinkles

<https://www.ncbi.nlm.nih.gov/pubmed/28195844>

Low Level Light Therapy with Red Light-Emitting Diodes for Face Anti-Aging and wrinkles elimination

<https://www.ncbi.nlm.nih.gov/pubmed/25039464>

Red Light Phototherapy in anti-aging for skin rejuvenation

<https://www.ncbi.nlm.nih.gov/pubmed/17173579>

Acne treatment with Red Light and other monochromatic light LEDs phototherapy

<https://www.ncbi.nlm.nih.gov/pubmed/28095551>

NEGATIVE ION THERAPY

Negative Ions efficiency for health

<http://www.sciencedirect.com/science/article/pii/S1352231004005953>

Air Ions for lung health

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3848581>

Effects of negative ions on Asthma and bronchitis patients

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC459615>

Depression and low mood treatment with ions

<https://www.ncbi.nlm.nih.gov/pubmed/7181816>

Acupuncture-like stimulation methods of hot stones effective for many disorders including carpal tunnel syndrome

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5481834>

Anions efficiency in treatment SAD (Seasonal Affective Depression)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3598548>

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