

## Laser Therapy

Low-Level Laser Therapy is the use of cold laser energy that safely penetrates one to two inches into the skin to create therapeutic effects in the muscles and joints. Research has shown that these effects include improved healing time, pain reduction, increased circulation, and decreased swelling. When laser light is absorbed by living tissue, it triggers biological reactions within the cells. Chemical substances are produced, released and carried by blood and lymphatic flow to other parts of the system. In this way the effects of cold laser light create broad systemic impact.

In the United States, Laser Therapy has been FDA approved for the treatment of many pain syndromes. It is considered to be a safe and effective modality when used properly by a licensed practitioner.

Research documents:

- Reduction in pain by causing production of natural pain killers called endorphins.
- Reduction in inflammation by suppressing inflammatory enzymes that create swelling, redness, pain and heat.
- Enhanced lymphatic drainage, which increases circulation and reduces swelling.
- Release of tight muscles that create chronic pain, joint problems and decreased mobility.
- Faster bone repair by stimulating fibroblastic and osteoblastic proliferation.

*Tuner, J., & Hode L. (2009). The New Laser Handbook. Grangesberg, Sweden: Prima Books.*

There are thousands of published studies that describe the beneficial therapeutic effects of cold laser therapy, including hundreds of carefully controlled scientific trials that have demonstrated its clinical effectiveness. The following is a partial list of conditions that have shown successful outcomes in recent studies:

- Tennis/Golf Elbow
- Bursitis
- Jaw Pain
- Muscle Pain
- Peripheral Neuropathy
- Arthritis
- Back and Neck Pain
- Plantar Fasciitis
- Herniated Disc
- Whiplash
- Sprains/Strains
- Carpal Tunnel Syndrome
- Shingles
- Tendinitis

There are two broad categories of lasers, hot and cold. Hot lasers are used for surgery, skin resurfacing, destroying tumors, and, when the power is lowered, for pain relief. However, the heat that so effectively destroys tissue becomes a problem, because the heat may slow down healing and cause burns. Hot lasers may actually hinder healing. As the heat increases, it initially produces tissue overheating, followed by tissue damage.

Low-level cold lasers, such as our Apollo Class 3b laser, do not generate perceivable heat. Therefore, when the laser contacts the skin the patient experiences no warmth or burning as a result of the laser. Most patients feel nothing at all while a few may feel a slight tingling during the treatment. Many people will see a reduction in symptoms immediately. Others will experience relief more gradually. How fast your symptoms improve will help your clinician design the most effective treatment regimen.

If you or someone you know is suffering from pain and have not found the relief for which you are looking, please contact our office. We may be able to help you.

*Information provided by Anthony Meyer, D.C., of Renze Chiropractic Clinic, P.C. For more information, visit [www.renzechiro.com](http://www.renzechiro.com) or call the office at 965-3844.*