

## What is laser therapy

A therapeutic laser system delivers packets of light energy, or photons, deep into tissue without damaging it. These photons are absorbed into the cells and induce a chemical change called “photo-bio-modulation”. This light energy then inspires production of ATP in the cell. ATP is the fuel, or energy, cells need for repair and rejuvenation. Impaired or injured cells do not make this fuel at an optimal rate. Increased ATP production leads to healthier cells, healthier tissue, and healthier animals.

In simpler terms, if your pet is feeling pain, has inflammation or a wound, the laser is a sterile, pain-free, surgery-free, drug-free treatment. The laser is used to treat a variety of injuries, wounds, fractures, neurological conditions, skin problems, and all sorts of pain. Whether your pet is rehabilitating from trauma, injury, healing from surgery or simply feeling the effects of aging, the laser has been shown to provide relief and speed up healing.

The beneficial effects of laser light on tissue were first recognized almost forty years ago. Since then, there have been thousands of studies documenting the positive effects laser light has on different types of cells, tissue, and disorders. Recent advances in technology and manufacturing have made it possible to have this exciting modality available and affordable for clinicians to offer to their patients.

The laser light is delivered through a non-invasive hand piece that is moved over the affected area. Your pet will feel a gentle and soothing warmth. As the laser is administered, many pets will relax, much like you would for a good massage. The almost immediate relief of pain will allow your pet to be comfortable and any anxiety that your pet initially experienced will dissipate. All the humans in close proximity to the probe will wear eye protection. The eyes of the animals are directed away from the area of treatment or if necessary covered with a towel. The fur in the area of treatment does not need to be clipped. Your pet will feel much better and there are no ill side effects of being lasered.

Treatment protocols are unique to each patient and condition. Therefore, treatments will vary in time, complexity and cost. Generally the treatments start out on a more frequent schedule then are spaced further out as treatment continues. Many chronic conditions, such as arthritis, are best served by remaining on a regular maintenance schedule. When appropriate, laser therapy can be used along with other treatment plans for the best possible outcome.

Some applications of laser therapy:

**Anti-Inflammatory:** Creates vasodilation, activates the drainage process of the lymphatic system, reduces the mediators that incite irritation.

**Bone Repair:** Improves healing times after trauma or orthopedic surgery (can be used with metal hardware present).

**Infections:** Viral, fungal or bacterial – laser therapy stimulates the immune system.

**Intraoperative Procedures:** Can be used during surgery to bring healing directly to damaged tissues.

**Musculoskeletal System:** Sprains, strains, fractures, ruptures, disorders and degenerative conditions.

**Neurological:** Remediation of peripheral nerve injuries and spinal cord lesions, improves nerve function; accelerates nerve regeneration.

**Oral problems:** Gingivitis, stomatitis

**Pain management:** For acute or chronic conditions, especially beneficial at reducing pain from arthritis and neurological problems, can reduce or eliminate the need for drugs in certain cases.

**Skin conditions:** Ulcers, dermatitis, lick granulomas, burns, hot spots, pressure sores.

**Tissue Healing:** Accelerates cellular reproduction and growth, reduces inflammation, swelling and formation of scar tissue, prevents tissue damage and death.

**Wound Healing:** Induces cellular proliferation; increases formation of new blood vessels, activates collagen (the protein necessary for tissue replacement and repair) and DNA synthesis; prompts growth factor release, reduces wound closure time; increases breaking strength of wound.

.