

# Understanding Laser Therapy for Pain Management

Class IV laser therapy is used for the relief of pain, to accelerate healing and decrease inflammation.

When light source is placed against the skin, photons penetrate several centimeters down and are absorbed by the mitochondria (the energy producing part of a cell).

This energy results in the restoration of normal cell function. The main goal of laser therapy is to stimulate the cell to perform its natural functions, but at an enhanced rate.

In contrast to “cold lasers,” which provide no feeling or sensation, high power diode laser therapy provides a warm, soothing feeling.



## Positive Effects and Benefits of Laser Therapy

### Anti-Inflammation

Laser therapy has an anti-edemic effect as it causes vasodilatation, but also because it activates the lymphatic drainage system (drains swollen areas). As a result, there is a reduction in swelling caused by bruising or inflammation.

### Accelerated Tissue Repair and Cell Growth

Photons of light from lasers penetrate deeply into tissue and accelerate cellular reproduction and growth. The laser light increases the energy available to the cell so that the cell can take on nutrients faster and get rid of waste products.

### Increased Metabolic Activity

Laser therapy creates higher outputs of specific enzymes, greater oxygen and food particle loads for blood cells.

### Anti-Pain (Analgesic)

Laser therapy has a high beneficial effect on nerve cells which block pain transmitted by these cells to the brain and which decreases nerve sensitivity. Also, due to less inflammation, there is less edema and less pain.

### Improved Vascular Activity

Laser light will significantly increase the formation of new capillaries in damaged tissue that speeds up the healing process, closes wounds quickly and reduces scar tissue.

### Trigger Points and Acupuncture Points

Laser therapy stimulates muscle trigger points and acupuncture points on a non-invasive basis providing musculoskeletal pain relief.



## Laser Therapy for Onychomycosis (Toenail Fungus)

Fungal nail affects nearly 10% of the US population.

While many find the condition to be, simply, an eye sore, fungal nail can also lead to a larger problems including:

- infection of other toenails
- infecting friends and family
- increased pain
- ingrown toenails

Individuals with diabetes are also more susceptible to fungal nail given their compromised immune systems.

Laser therapy offers an effective, safe option for treating fungal toenail without the side effects of many oral medications.

