



# PHYSIOLOGICAL Effects of Laser Therapy

BIOFLEX® Laser Therapy utilizes scientifically developed and clinically tested protocols that maximize the effectiveness of treatment of an extensive range of clinical pathologies.

- ✓ Laser Therapy is a non-invasive, pain-free, light-based therapy that uses red and infrared light to target inflamed, injured and diseased tissues.
- ✓ Photons of light stimulate ATP production, thereby accelerating the healing process.
- ✓ Compared to traditional treatment, patients recover from musculoskeletal and peripheral nerve injuries with less scar tissue formation, accelerated cell regeneration and improved function.

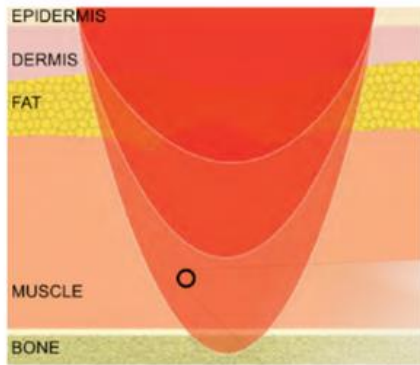


**Call**

**(250) 763.9355**

[www.okanaganlaser.com](http://www.okanaganlaser.com)

## TISSUE PENETRATION

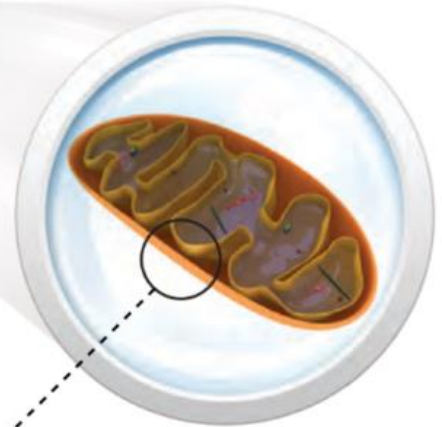


Photons of red and infrared light (600 – 900 nm) penetrate 5-10 cm deep into tissue and are absorbed by the mitochondria inside of cells.

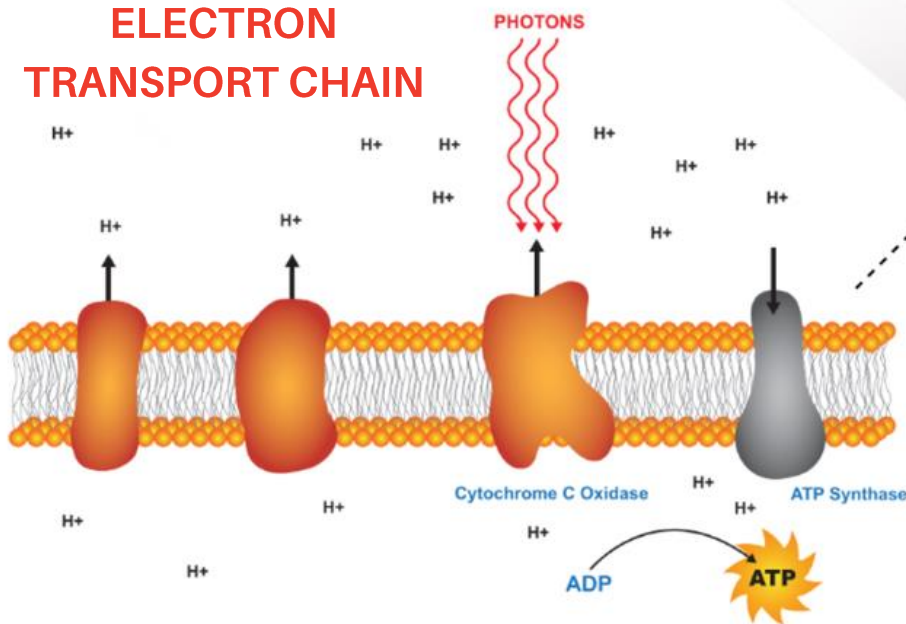
## EUKARYOTE CELL



## MITOCHONDRIA



## ELECTRON TRANSPORT CHAIN



Cytochrome C Oxidase in damaged tissue absorbs these photons leading to increased ATP production.

The advantages of Laser Therapy are supported by over 4,000 research articles and 500 clinical investigations. At Okanagan Laser Solutions, we utilize the BIOFLEX® Professional Laser System, which has been designed and developed by Meditech International Inc. in Canada. This sophisticated laser therapy device is entirely non-invasive, making it an attractive choice for patients looking for effective and gentle treatment options. There are no contraindications to care.



**ATP PLAYS A ROLE IN ENERGY METABOLISM AND INTRACELLULAR SIGNALING**



**CELL PROLIFERATION**



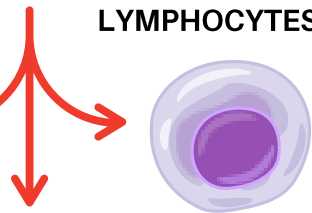
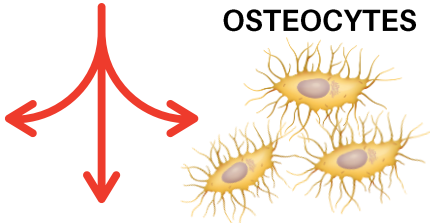
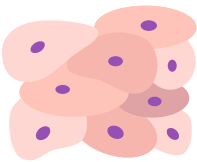
**INFLAMMATORY MEDIATORS**

**FIBROBLASTS**

**OSTEOCYTES**

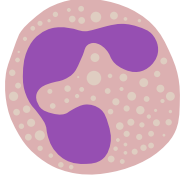
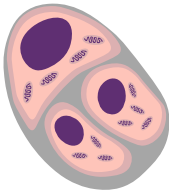
**MACROPHAGES**

**LYMPHOCYTES**



**CHONDROCYTES**

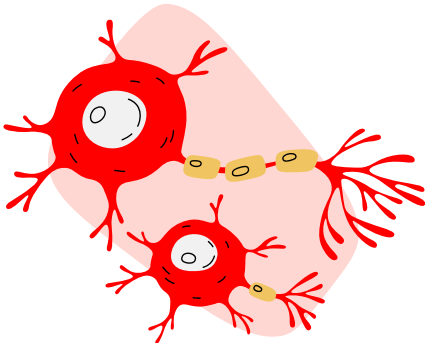
**NEUTROPHILS**



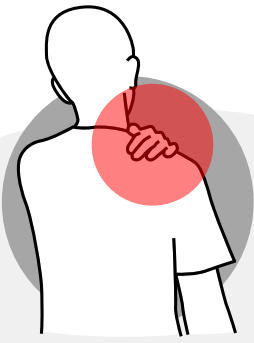
**Collagen, Cartilage & Bone Regeneration**



**Inflammation & Edema**



**Tissue & Nerve Regeneration**



**Resolution of Inflammation & Pain**