Low Intensity Laser Therapy

The technology utilizes superluminous and laser diodes to irradiate diseased or traumatized tissue with photons. These particles of energy are selectively absorbed by the cell membrane and intracellular molecules, resulting in the initiation of a cascade of complex physiological reactions, leading to the restoration of normal cell structure and function.

The process is curative and therefore results in the elimination of symptoms including pain. In addition, it enhances the body’s immune system response and facilitates natural healing.

The therapy is completely safe and has no adverse side effects.

The physiological effects of LILT include an increase in:

- **DNA synthesis**: the protein building block essential to the process of cell regeneration
- **Collagen production**: increases tensile strength of muscles, tendons and ligaments
- **ATP (adenosine triphosphate)**: the fuel of the cell required in facilitating cell metabolism
- **Endorphins**: morphine-like substances produced by the body to reduce the sensation of pain

**Modulation of cellular components involved in the healing process**
- i.e. macrophages, fibroblasts, lymphocytes, etc.

**Stimulation of:**
- immune response
- lymphatic drainage (reduction in edema)
- angiogenesis - formation of new capillaries and arterioles resulting in improved circulation / tissue oxygenation

LILT is the treatment of choice for:

**Soft Tissue and Sports Injuries**
- Ligament/tendon/muscle tears
- Knee dysfunction (Meniscal/ligamentous tears)
- Fractures

**Repetitive Stress Injuries**
- Carpal Tunnel Syndrome
- Rotator Cuff Injuries
- Epicondylitis

**Inflammatory Conditions**
- Tendonitis (supraspinatus/achilles etc.)
- Plantar Fasciitis
- Rheumatoid Arthritis

**Back Problems**
- Degenerative Osteoarthritis
- Spinal Stenosis/Sciatica
- Disc Herniation
- Myofascitis

**Others**
- Temporo-mandibular Joint Dysfunction
- Lymphedema
- Gout
- Fibromyalgia
- Reflex Sympathetic Dystrophy
How Long Does a Treatment Take?
Treatments are typically thirty minutes to one hour in duration depending on the condition being treated.

How Many Treatments Are Required?
The number of treatments will depend on the chronicity and the extent of the pathology involved. Based on the genetic makeup of the cells, an individual’s response to LILT will vary to some degree. A recent clinical review, including 1,000 consecutively treated patients, reveals the average number of treatments to be 9.4.

Are There Any Side Effects?
Unlike most pharmaceutical solutions and other therapeutic options, laser therapy is non-toxic, non-invasive and in over one million individual treatments, no significant adverse effects have been noted.