



Is BIOPTRON Light Therapy the same as laser therapy?

No, light therapy is not the same as laser therapy.

- **BLT** contains light from a wide range of wavelengths.
- **BLT** emits light that is of low-energy so there is only a minimal heating effect, making the treatment safer.
- **BLT** devices emit light with a wide beam to allow exposure of larger treatment area.

Is BIOPTRON Light Therapy expensive?

BLT is cost-effective.

Is BIOPTRON Light Therapy safe?

Yes, light therapy with BLT is safe. To date, there are no known adverse effects associated with BLT.

Where can I get more information on BIOPTRON Light Therapy?

Comprehensive information on all aspects of BIOPTRON Light Therapy is available from:

Please add local contact details here:



BIOPTRON Pro1



BIOPTRON 2



BIOPTRON Compact III

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What is lower back pain?

Pain in the lower part of the back is extremely common and more than 75% of the population suffer from lower back pain at some time in their life.

Recurrent or persistent lower back pain cause major interruption of mobility.

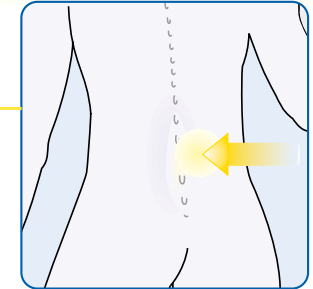
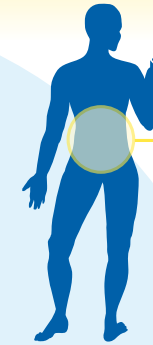
What are the causes & risk for lower back pain?

More than 90% of lower back pain is caused by damage to anatomical structures in the back and spine (called mechanical lower back pain); e.g. injury to spinal muscles, ligaments, spinal bones (called vertebrae) or their joints, damage to an intervertebral disc, etc. Less common reasons for lower back pain include infection or inflammation in the spine, metabolic bone disorders and cancer. Lower back pain can occur in anyone but risk factors include pregnancy, obesity, post-menopause, increasing age, poor posture and poor technique during lifting/bending.

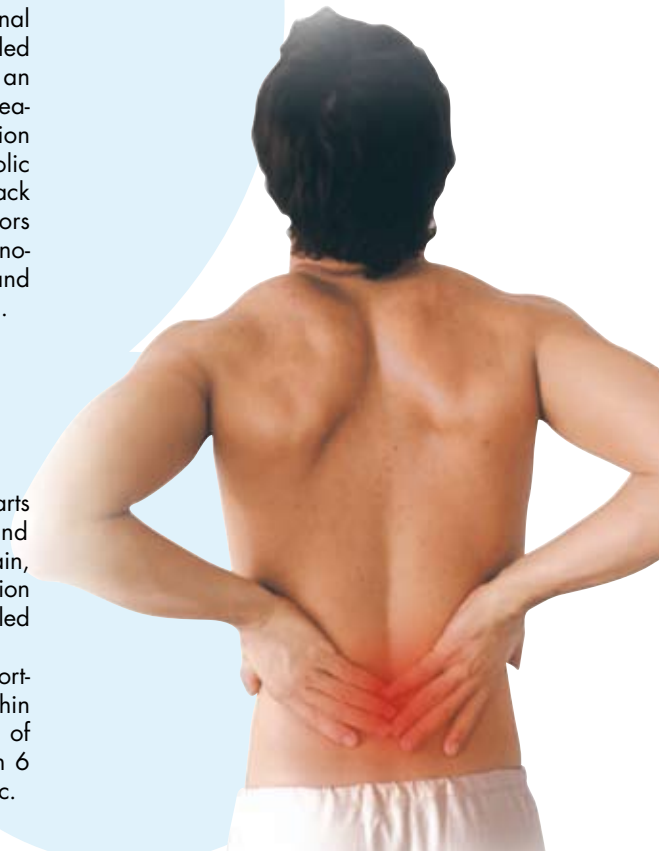
What are the common symptoms of lower back pain?

Mechanical lower back pain usually starts suddenly, often following an injury, and responds to rest. Symptoms include pain, stiffness, difficulty walking and deviation in the normal shape of the spine (called scoliosis).

The majority of cases are usually short-lived, with symptoms improving within around 7 days. A small proportion of cases (less than 10%) last longer than 6 months; these are referred to as chronic.



Apply to affected area for 4-10 minutes, 1-2 times per day



What treatment is available for lower back pain?

Lower back pain is one of the most frequent reasons for visiting the doctor, although many people seek help from a physical therapist or an osteopath. The main types of treatment available for lower back pain include drug therapy and physical therapy.

Drug therapy uses a variety of medicines to reduce pain and swelling (called analgesics and anti-inflammatory agents); these can be given as a tablet or an injection. In addition, muscle relaxants and antidepressants may be prescribed.

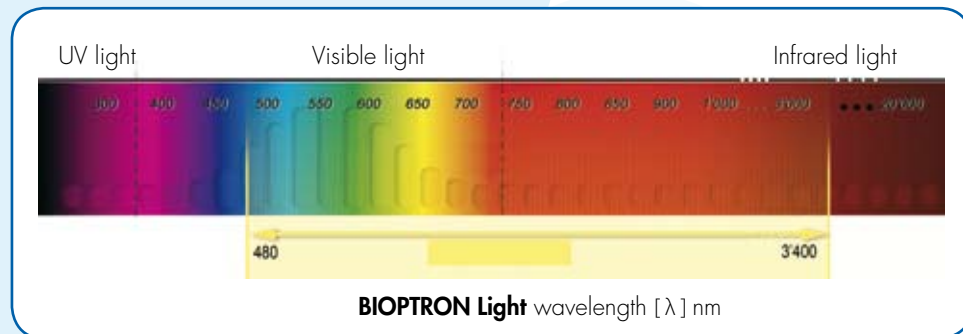
Physical therapy encompasses a variety of techniques, including therapeutic exercise, massage, ice packs or heat therapy, ultrasound and TENS (transcutaneous electrical nerve stimulation).

A new and innovative type of treatment for relieving pain & tissue swelling is the use of **LIGHT THERAPY**.



What is BIOPTRON Light Therapy?

Light is a form of energy and has 'wave-like' properties; the difference between the various colours of light is determined by their wavelength. Light has been used as a healing tool since ancient times. Scientists now have a better understanding of which components of natural light are efficient in the stimulation of healing. This has led to the development of optical devices to produce various types of 'medically useful' light, such as the **BIOPTRON Light Therapy (BLT) System**.



What effect does BIOPTRON Light Therapy have on the human body?

BIOPTRON Light Therapy devices emit light containing a range of wavelengths that correspond to visible light plus infrared radiation, both of which have been reported to stimulate biological reactions. Importantly, no harmful ultraviolet (UV) radiation is present in **BLT**.

When the **BLT** device is held over the skin surface, energy from the emitted light penetrates the underlying tissues (*Figure 1*). This produces a biological response, called photo-biostimulation, causing various reactions within these tissues that may result in the reduction of pain and promotion of healing.

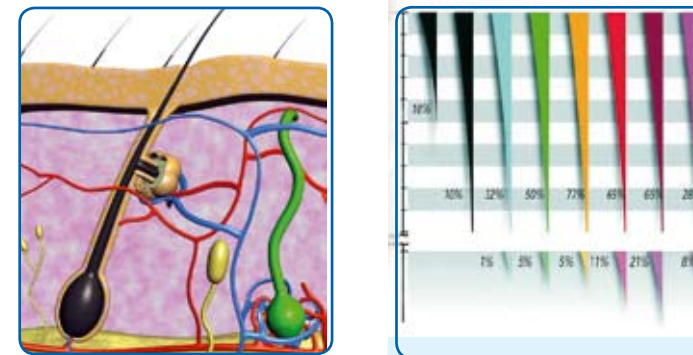


Figure 1

How does BIOPTRON Light Therapy help relieve pain?

Light therapy is believed to reduce pain sensation in several ways.

- Improving local blood supply & reducing muscle spasm.
- Reducing the release of chemicals that stimulate pain receptors (called an anti-inflammatory effect).
- Inducing the release of the body's natural pain-killing agents (called endorphins).
- Direct action on nerve fibres to prevent transmission of pain impulses to the brain.

Therefore, the positioning of a **BLT** device over the injured area (e.g. the elbow) allows light therapy to be applied to help reduce pain and discomfort.