

OPTIMUS™ Lumina

Veterinary Phototherapy Device Factsheet

Red light therapy, also known in the past as “low-level light therapy” and nowadays, as “photobiomodulation”, has been researched for more than 50 years, and thousands of academic studies have proved its diverse range of therapeutic effects.¹

Optimus Lumina is a non-invasive, drug-free device that uses red, infrared and blue light to assist in the healing of injuries, wounds and infections. Designed by physiotherapists, it provides a complementary therapy to other treatments and interventions, maximising patient care.

Treating the affected area with red and infrared light therapy, optimises the opportunity for recovery – increasing circulation, bringing nutrients to the area and aiding better metabolic waste removal.

¹ <https://pubmed.ncbi.nlm.nih.gov/28070154/>

Red light therapy also relieves pain and releases endorphins by stimulating acupuncture points. When applied, blue light therapy works by limiting the growth of bacteria, therefore, reducing the risk of infection.

Helping you build the perfect treatment pathway

When you're working with clients treating long term conditions, it can be frustrating not to be able to provide practical support in between treatments. Optimus Lumina is an effective, safe, therapeutic device that is so simple to use – both you – and your clients can be confident that they're doing the right thing.

Offering three key benefits:

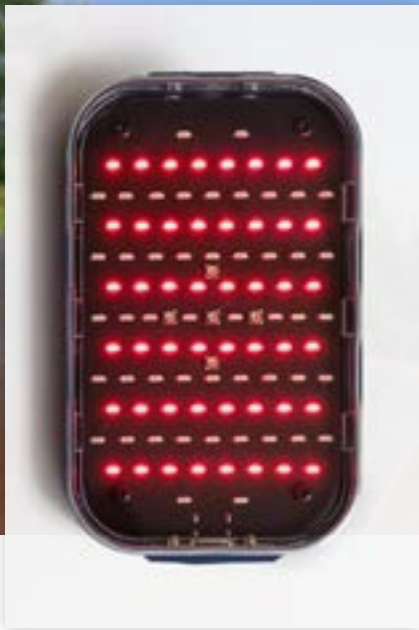
[1] Red and IR Light Therapy is proven to relax muscle tension and spasms relieving pain, inflammation and chronic conditions such as arthritis and overuse injuries.



What's in the box? A Lumina phototherapy device complete with charging cable and storage pouch.

[2] Using Optimus Lumina gives pain relief through red light therapy releasing endorphins (the body's natural pain killing chemicals) and serotonin (the key chemical for stabilising mood and enhancing feelings of wellbeing).

[3] Blue light lessens the risk of infection by reducing the growth of bacteria. This is particularly useful for post-operative wounds and supporting recovery from bacterial infections.



Why does light therapy work?

Red and IR light therapy benefits:

- Improve circulation and blood flow
- Increase tissue oxygenation
- Decrease pain and discomfort
- Relax the nervous system
- Release beneficial chemicals in the body such as nitric oxide and stimulates ATP production
- Improve energy, metabolism and cellular functioning
- Stimulate the body's own innate healing processes
- Maintain homeostasis
- Support the body in maintaining health and wellness

Why does light therapy work?

Every cell in the body contains mitochondria, the powerhouse for energy production. Chemical energy produced by the mitochondria is stored in a small molecule called adenosine triphosphate, or ATP.

When blood flow decreases, cells and nerves are deprived of oxygen and glucose, preventing the mitochondria from producing sufficient ATP.

Nerves sense this lack of ATP production, sending pain signals to the brain.

So how can red light therapy help?

Red light therapy kickstarts a chemical reaction in the mitochondria, stimulating production of ATP.

The result is a cascade of beneficial chemical reactions throughout damaged cells, stimulating cell regeneration and healing. The resulting increased localised blood flow reduces inflammation, increases tissue oxygenation and reduces healing time.

More oxygen = more healing.

Red Light therapy also stimulates the release of nitric oxide, the body's natural vasodilator, which causes widening of the blood vessels and capillaries. The result?

- Increased lymphatic (blood) flow
- Enhanced lymph drainage
- Improved oxygenation of cells
- Accelerated waste removal
- Relaxation of muscle cells!

A Cellular 'Spring Clean' : supporting cell repair and growth

Cells will repair themselves - or naturally self destruct when they are damaged. If cell counts are low in the area of light exposure, new cells will migrate to that area, or be stimulated to grow.

Pain reduction.

When blood flow dips, oxygen levels drop too, and often that's when we feel pain. So by contrast, boosting oxygen levels and blood flow can help to reduce pain, easing symptoms.

Red light therapy also reduces the excitability of nervous tissue (pain reduction) by stimulating the release of endorphins - the body's natural pain-killing chemicals, and serotonin, the critical hormone for mood stabilisation, stress reduction and wellbeing.

For more information on purchasing Optimus Lumina devices please contact a member of the Optimus team on tel: 07498 534275 or email: admin@optimustherapytech.com

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5066074/>



This is a fantastic little device, powerful and effective enough for me to use as an equine physiotherapist, safe and straight forward enough to loan to clients for continued use between sessions where necessary.

**Wendy Vaughan,
Equine Physiotherapist & McTimoney-Corley Animal Therapist**