

PHOTOBIOMODULATION THERAPY

Photobiomodulation (PBM) Therapy, previously known as Low Level Laser Therapy, is the application of Red and Near Infrared light to living tissue. Unlike drugs and surgery, PBM Therapy

- is non-toxic
- is non-invasive
- has no side effects
- promotes cell regeneration
- reduces inflammation and pain

When proper colors and intensity is applied, PBM Therapy, has been clinically shown to

- increase cellular energy
- increase blood flow
- reduce inflammation
- stimulate increased rate and quality of tissue repair

This cascade has been shown to result in

- improved muscle performance
- improved joint motion
- enhanced wound healing
- reduced pain

Pretreatment with PBM Therapy has demonstrated

- increased exercise capacity
- longer exercise times
- improved post exercise recovery

PBM Therapy has also been reported to release certain brain compounds that positively affect mood and sleep.

HOW DOES IT WORK?

When cells experience long term exposure to negative external influences such as cigarette smoking or second hand smoke, too much sugar or chemicals in our diet, too much sun on our skin, short term influences like bacteria or viruses or injury, and even things we consider healthy like exercise, there is often a production of unstable molecules called free radicals. Our cells respond by neutralizing these free radicals with rest and antioxidants consumed in our diet.

However, the inability to do this negatively affects the production of cellular energy. This further stresses the cell triggering the production of another very volatile free radical called causing something called oxidative stress.

Have you ever seen an apple turn brown after it is cut in half? Or a piece of metal rust? These are examples of Oxidative Stress.

Oxidative stress is essentially an imbalance between the production of free radicals and the ability of the body to counteract or detoxify their harmful effects through neutralization by antioxidants, and has been accepted as the underlying component of aging, a trigger for most diseases and degenerative conditions, as well as a component in the inflammatory phase of acute and chronic injuries.

Extensive research during the last two decades has revealed oxidative stress can lead to chronic inflammation, which in turn contributes to chronic diseases including cancer, diabetes, cardiovascular disease, neurological disorders and pulmonary diseases.

PBM THERAPY AND OXIDATIVE STRESS

PBM Therapy appears too good to be true as it does many things, but really it does just one thing and it does it very well, and that is, it reduces oxidative stress.

When light of the correct color, and intensity is applied to the cells, it displaces these free radicals, ultimately removing the oxidative stress and triggering a downstream cellular cascade that stimulates and contributes to the repair process.

Since every cell has hundreds to thousands of the primary receptor site for light, PBM Therapy properly applied can trigger a reduction in oxidative stress, increase circulation, increased cellular energy and the ability to begin normalizing and healing. How much the cell repairs depends on damage was previously done, and if the cell has the capacity to heal.

WHAT CAN PBM THERAPY WORK FOR?

This non-invasive and safe therapy has been shown to be highly effective for reduced pain and discomfort in chronic inflammatory conditions such as

- Arthritis
- Fibromyalgia
- Polymyalgia
- Chronic fatigue

Preconditioning with PBM Therapy has been shown to be highly effective for

- improved sports performance
- reduced post exercise soreness
- faster recovery from sports injuries
- increased energy and vitality
- improve wellness goal outcomes

PARAMETERS THAT AFFECT OUTCOMESHOW DOES PBM THERAPY COMPARE WITH OTHER TREATMENTS?

PBM Therapy works at the cellular level, stimulating repair and normalizing cell function. Many therapies only address symptoms, without addressing the source.

With that said, chronic degenerative changes often cannot be "healed", instead they must be managed. PBM Therapy is a safe, effective, non pharmaceutical way to manage pain and inflammation.

HOW IS IT APPLIED?

Until recently, PBM Therapy was only available in spot therapy devices. Low intensity LED cluster probes are used to stimulate tissue repair, and higher intensity laser probes directed at nerves to target pain are release Trigger points. These decrease pain and relaxes muscle spasms by inhibiting atonal flow in pain fibers.



PBM Therapy can now be delivered to the entire body using a State of the Art FULL BODY DELIVERY SYSTEM called NovoTHOR.



The advantage of the NovoTHOR is it is a whole body delivery system of PBM Therapy that has been designed to deliver optimal wavelengths, power densities and dosages based on published clinical research outcomes.

Now in just 8-20 minutes, you can receive a full body light session that targets inflammation and oxidative stress.

WHAT WILL I FEEL?

PBM Therapy does not heat tissue, it does however increase circulation so a warming sensation is often experienced.

ARE THERE ANY SIDE EFFECTS?

The following anecdotal outcomes have been reported by clients using NovoTHOR.

- "Temporary euphoric feeling"
- "Increased energy levels"
- "Improved sleep patterns"

- "Improved mood"
- "Improved skin clarity and tone"
- "Improved bowel function"
- "Decreased swelling of extremities"
- "Increased energy"
- "Increased mental clarity"
- "Increased general sense of well being"

These outcomes may not apply to every person, and are not intended to guarantee, promise, represent and/or assure that anyone will achieve the same or similar results.

Occasionally some clients may experience mild fatigue, discomfort, or aches after treatment. These responses should reduce after 24 - 48 hours, if they persist notify your technician at your next appointment.

ARE THERE ANY PRECAUTIONS?

If you have any of the following conditions, please notify your technician before utilizing the NovoTHOR.

- Pregnancy
- Epilepsy
- Cancer
- You are taking any medications or supplements that are cause light sensitivity.

HOW MANY THERAPIES ARE NEEDED?

That depends on you and your "Human Variables". Every person's condition is unique, therefore there treatment course is as well. Response times can be affected by age, general health, how long your condition has existed, the severity of your condition, presence of underlying structural imbalances. i.e. degenerative or stenosis, and your compliance to the therapy.

However there are some general rules of thumb that apply to PBM Therapy.

- Acute injuries and inflammation from muscle strains and sprains, cuts, bruises, burns, etc typically show very rapid improvement and can resolve in 2-4 treatments.
- Long-term, chronic conditions can take as many as 12-16 sessions to get significant benefits.

HOW OFTEN WILL I NEED TO HAVE PBM THERAPY?

Therapy can be done daily, however that is not always practical or convenient. Minimum interval recommendation is 2-3 times per week until your goals are met, then 1-2 times per week for ongoing maintenance.

For individuals who exercise frequently or at high levels, 3-5 times per week is recommended for optimal recovery.

I HAVE NOT HEARD OF THIS BEFORE, IS IT REAL?

The use of visible and near-infrared (NIR) light for reducing pain, inflammation and edema, has been known for almost forty years. Over 400 Randomized Controlled Trials have been published using PBM devices, and the technology has been featured in over 4,000 laboratory studies. PBM is used in thousands of clinics, hospitals and elite sports institutions in over 70 nations.

[CLICK HERE](#) for samples of published research.

IS PBM THERAPY COVERED BY INSURANCE?

No

FDA INTENDED USE FOR NOVOTHOR PBM THERAPY SYSTEM INCLUDE:

- Restoration of motion to joints
- Redevelop muscles
- Adjunct to obesity as part of a diet and exercise program