

EXPERIENCE PAIN RELIEF, INCREASED CIRCULATION AND MORE.

Our partners have decades of medical device and insurance industry experience working with healthcare products, services and other solutions. We have introduced dozens of products and services to the marketplace.

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### **ROB BERMAN**

rob@energiamedical.com TOLL FREE 833-429-4040 www.energiamedical.com We are always happy to answer your questions or discuss how Light Therapy might help you.

Rob is a Partner at Energia Medical, LLC. an energy device company. Energia Medical specializes in light therapy and laser products. Rob has written 10 eBooks on light therapy and lasers. He has over 2 dozen articles published on light therapy, laser, and practice management. He has an MBA in Marketing from Boston University.

# **INTRODUCTION**

Pain, diminished circulation, muscle spasms, aches and stiffness disrupt the lives of millions of people, inhibiting their mobility and freedom.



Light therapy has been proven to:

- relieve pain
- increase circulation
- relax muscles
- relieve muscle spasms
- relieve aches/stiffness caused by arthritis
- reduce wrinkles and acne

20 Minutes, 3 or more times a week to experience change.

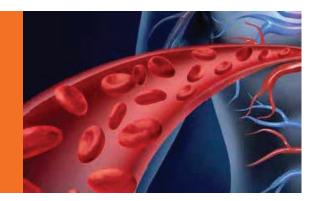


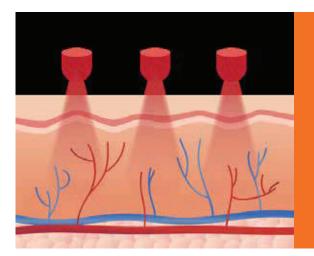
# HOW DOES LIGHT THERAPY WORK?

Many scientific studies have shown that light therapy is effective in improving bodily functions. It works by increasing ATP (adenosine triphosphate) synthesis in the mitochondria, activating the electron transport system, and many other biochemical and biophysical reactions in the tissue.

There are two main factors to maximize the benefits of light therapy:

THE WAVELENGTH
THE INTENSITY OF LIGHT ENERGY



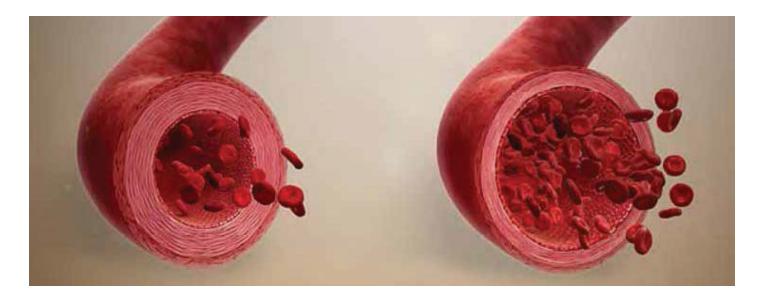


#### **HOW DOES IT WORK?**

The red and infrared light triggers the release of Nitric Oxide, which increases vasolidation and improves healing. The vasolidation creates increased bloodflow, bringing oxygen and nutrients to the impacted cells. In addition, speeding up the removal of waste products.

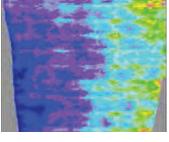
# INCREASE CIRCULATION

After just 20 minutes of light therapy, bloodflow is increased to nerves and other tissues, and this boost in local circulation lasts for several hours. Looking at the graphic below, you can see on the left is pre-treatment and right is post-treatment. Note the greatly increased bloodflow.



Nitric oxide is also a messenger molecule that triggers healing processes in the body. By increasing the production of nitric oxide, infrared and red light therapy increases circulation, speeds healing, relieves pain, relaxes muscles, relieves mucle spasms, and relieves aches/spasms caused by arthritis.





A ETED

The image on the left shows bloodflow BEFORE a light therapy treatment.

The image on the right shows bloodflow AFTER one light therapy treatment.

# LIGHT THERAPY & PAIN



### Increased nitric oxide production

- 1. Nitric oxide has both a direct and indirect impact on pain sensation. As a neurotransmitter, it is essential for normal nerve cell action potential in impulse transmission activity.
- 2. Indirectly, the vasodilatation effect of nitric oxide enhances nerve cell perfusion and oxygenation.



## Increase in beta-endorphins

The localized and systemic increase of endogenous peptides after Light Therapy irradiation has been clinically reported in multiple studies to promote pain reduction.



## Decreased bradykinin levels

Bradykinins elicit pain by stimulating nociceptive afferents in the skin and viscera, mitigation of elevated levels through Light Therapy can result in pain reduction.



#### Ion channel normalization

Photobiomodulation promotes normalization in Ca++, NA+ and K+ concentrations, resulting in pain reduction as a result of these ion concentration shifts.

# LIGHT THERAPY & PAIN CONTINUED



## Increased nerve cell action potentials

- 1. Healthy nerve cells tend to operate at about -60mV, and fire at about -20 mV. Compromised cell membranes have a lowered threshold as their resting potentials average around the -40 mV range.
- 2. That means that normal non-noxious activities produce pain.
- 3. Light Therapy normalizes the body's electrical system and/or charging cells back to -60 mV range.



## Blocked depolarization of C-fiber afferent nerves

- 1. Pain blocking effects of Light Therapy can be pronounced, particularly in low velocity neural pathways, such as non-myelinated afferent axons from nociceptors.
- 2. Light irradiation suppresses the excitation of these fibers in the afferent sensory pathway.



## Increased release of acetylcholine

Increasing the available acetylcholine, Light Therapy helps in normalizing nerve signal transmission in the autonomic, somatic and sensory neural pathways.



# Axonal sprouting and nerve cell regeneration

- 1. Several studies have documented the ability of Light Therapy to induce axonal sprouting and some nerve regeneration in damaged nerve tissues.
- 2. Where pain sensation is being magnified due to nerve structure damage, cell regeneration and sprouting may assist in reducing pain.

# MUSCLE SPASMS, ACHES, & STIFFNESS

Light Therapy dramatically stimulates muscle trigger points & acupuncture points non-invasively providing musculoskeletal pain relief.



Generally, acute conditions will respond more quickly than chronic conditions.

For acute conditions: we get users starting to feel a difference in the first few treatments.

For chronic conditions: we find the level of maximum improvement is between 24-36 treatments. Ongoing maintenance treatments will be needed.

# WRINKLE REDUCTION AND ACNE

#### Wrinkle Reduction

We are prone to exhibiting wrinkles as we get older. There can be many reasons.

"Red and blue lights are typically promoted in LED skin treatments. Experts believe that red LED lights act on cells in the skin known as fibroblasts, which play a role in the production of collagen, a protein that makes up a large part of connective tissue and helps the skin to recover when it's harmed."

Source: Harvard Healthcare

Key Benefits of Light Therapy according to The Cleveland Clinic:

- Smooths and firms face lines and wrinkles
- Evens skin tone and texture
- Reduces the appearance of sun spots, age spots, and discoloration
- Clears mild to moderate acne
- Eliminates redness and reduces inflammation





# WRINKLE REDUCTION AND ACNE

#### Acne

- Acne is the most common skin condition in the United States, affecting up to 50 million Americans annually.
- Acne can occur at any stage of life.
- In 2013, the costs associated with the treatment and lost productivity among those who sought medical care for acne exceeded \$1.2 billion.

Source: American Academy of Dermatology Association

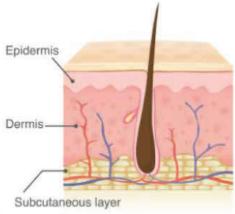
"Blue light can also spell lights out for some types of acne. Many classes of common acne are caused by a bacterium called Propionibacterium acnes, or P. Acnes, which live on your skin. And P. acnes just so happens to emit its own photosensitizer which makes it sensitive to blue wavelengths of light.

Shining blue light on acne prone skin can kill the bacteria and clear up blemishes"

Source: Cleveland Clinic Website



# Normal Skin



Acne Appeared



# WHY ENERGIA MEDICAL?

Our devices are easy to use and non-invasive. The devices are a drug free pain relief and increased circulation treatment.



Energia Medical light therapy products offer an efficient and comfortable experience for patients. Therapy pads are designed in different sizes and shapes to allow application to a wide variety of body parts. Users treat from smaller areas like hands and feet to larger areas like the shoulders, hips and back. More that one pad can be utilized at the same time to treat multiple body parts.

Over 8,000 studies have been conducted analyzing the impact of light on the body.

# EASY PAIN RELIEF THERAPY

Each pad connects with a nine (9) foot USB cable. You may plug into the power adapter, the USB port in your car or computer.

The pad contains a built in controller with three protocols:

- A) circulation multi-frequency protocol
- B) pain multi-frequency protocol
- C) all Nogier frequencies protocol



### Available as 3 & 6 Port Controller

The controllers provide the opportunity to select one Nogier frequency during the treatment time of 20 minutes or multiple frequencies of Nogier or Solfeggio. There are 11 pre-programmed modes. Additionally, mode 12 allows you to select a specific Hertz level from 1 to 9999 and time from 1 minute to 99 minutes.





# FREQUENTLY ASKED QUESTIONS

### What is infrared Light Therapy?

Decades of research found that certain wavelengths of light within the red and infrared bands were very beneficial to living tissue.

# What are the effects of Light Therapy?

The 1998 Nobel Prize was awarded to scientists who discovered the relationship between near infrared light, Nitric Oxide and increased circulation.

#### How does nitric oxide increase circulation?

During the 20 minute treatment, the infrared light energy releases nitric oxide from hemoglobin and endothelial cells. Nitric oxide is a signaling molecule that relaxes smooth muscle cells found in the arteries, veins, and lymph vessels. When these muscles relax, the vessels dilate, thus allowing increased circulation.

# Who uses infrared Light Therapy?

Light Therapy is currently being used in clinical and home settings around the world. LightTherapy has been in use by the medical profession to increase circulation and reduce pain or more than 20 years.

## What does it feel like when using Light Therapy?

A comforting, warm feeling.

# How often can the Light Therapy system be used for chronic conditions?

A minimum of three times per week for 8-12 weeks. More frequent usage can reduce the number of weeks necessary to reach maximum improvement. Typically, a regular schedule of maintenance treatments helps sustain the improvement.

# Can I use multiple modalities at the same time?

Yes. Multiple modalities should provide a better and quicker resolution to the condition.

# QUESTIONS YOU SHOULD ASK WHEN RESEARCHING A LIGHT THERAPY DEVICE

There are multiple manufacturers and associated products available. You should ask the following questions when researching a Light Therapy Device.

## Are the LEDs at the surface or recessed in the pad?

Recessed LEDs lose power as the light travels to the surface. Energia Medical pads all have their LEDs at the surface.

#### Are LEDs flat or round?

Energia Medical utilizes flat LED tend to more comfortable than round LEDs because they are less pointy.

### Are the pads cleanable?

Yes. Energia Medical pads are coated in silicone. Just wipe them. No plastic bags bags required.

## Are the pads and controllers manufactured in an ISO certified facility?

Quality of the pads and controllers is very important. ISO is an international organization that certifies manufacturing facilities for following quality standards. Energia Medical pads and controllers are manufactured in an ISO certified facility.

# Are the pads cleared by the FDA?

Pads sold on Amazon, eBay and other online platforms may not be cleared by the FDA for usage in the US. Even some pads sold in healthcare ofices may not be cleared. Ask before you buy. Energia Medical pads are FDA cleared and are not sold on Amazon or eBay.

## How long is each treatment?

Some available pads may require up to 80 minutes to complete a treatment cycle. Energia Medical pads take only 20 minutes.



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