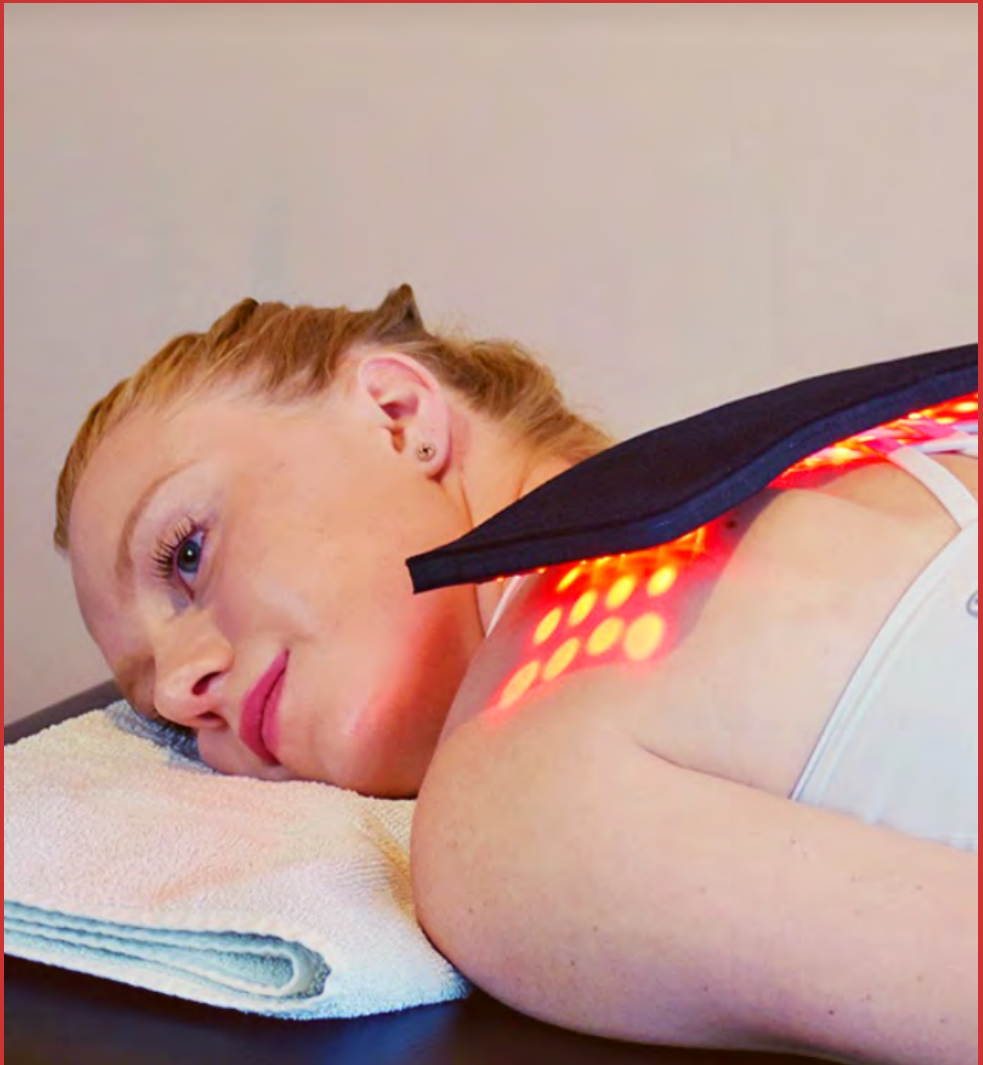




# Light Therapy for Clinical Use

*Outstanding Patient Outcomes and Clinic Revenue*



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# Introduction

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



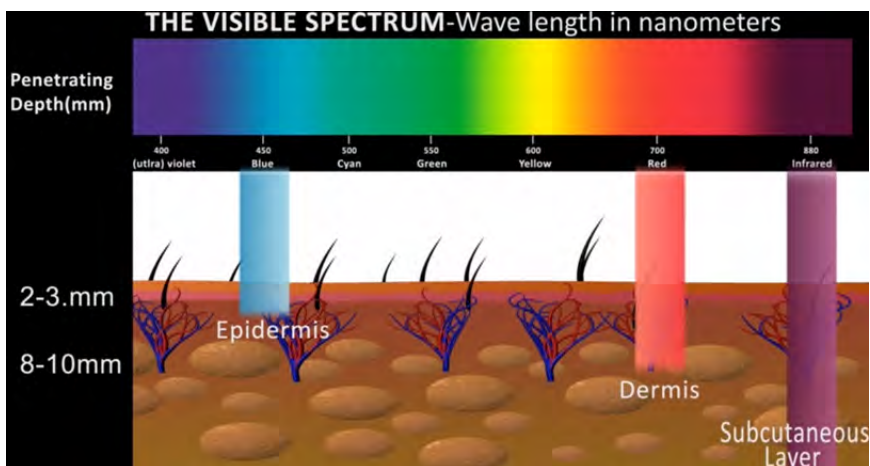
Pain is a main driver of patient engagement with healthcare professionals.

## Light therapy has been proven to:

- relieve pain
- increase circulation
- relax muscles
- relieve muscle spasms
- relieve aches/stiffness caused by arthritis

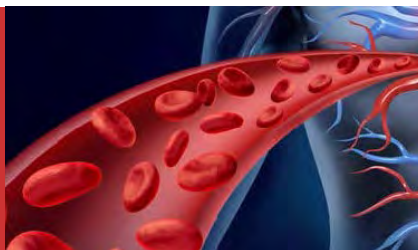
# HealthLight

HealthLight manufactures photo-modulated (pulsed, light emitting diode) devices also known as light therapy devices. The infrared, visible red and blue LEDs are the heart of the HealthLight Therapy systems, providing gentle but powerful non-coherent light that penetrate living tissue.



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

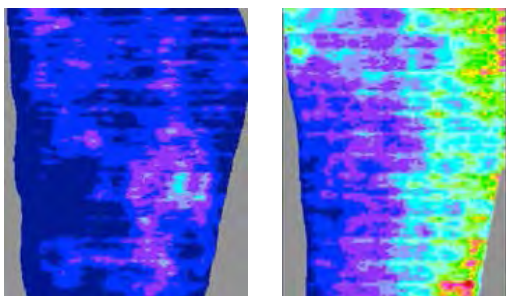
**the wavelength**  
**the intensity of light energy**





# How Does Light Therapy Work?

Light Therapy acts mainly on the mitochondria, where most light absorption in the cell occurs,<sup>1</sup> and it also acts on calcium channels located on the surfaces of cells which convey information to and from cells<sup>2</sup>.



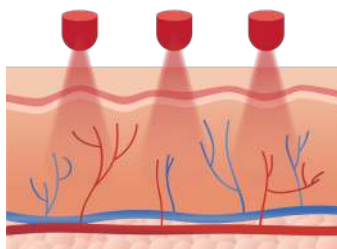
Images from Moor laser doppler

The image on the left shows bloodflow BEFORE Light Therapy treatment. The image on the right shows bloodflow AFTER one light therapy treatment.

## HOW DOES IT WORK?

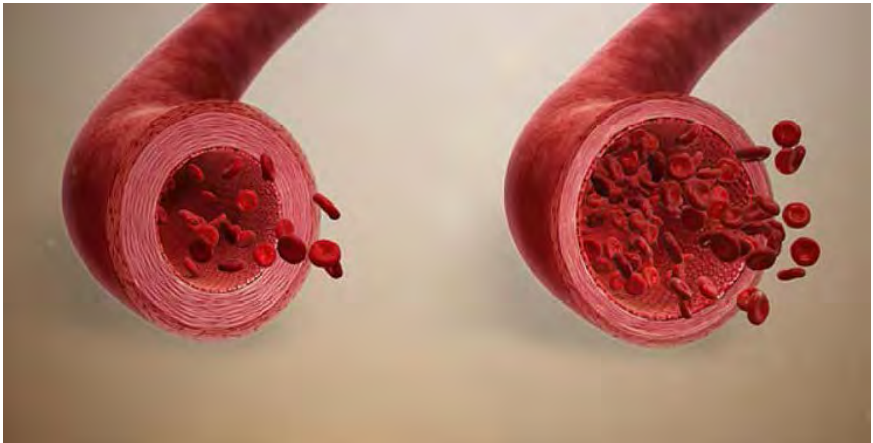
The cellular effects of Light Therapy largely stem from its effects on nitric oxide (NO), which are two-fold:

1. Stimulates NO production possibly by increasing the activity of nitric oxide synthase, the enzyme that produces NO<sup>3</sup>.
2. It is thought that Light Therapy works by dissociating nitric oxide (NO) from the energy producing machinery within the mitochondria<sup>2</sup>.



## Increase Circulation & Relieve Pain

When red and infrared light waves reach the surface of the body, they penetrate into the skin a very small distance to reach blood and other cells near the dermis surface. These cells' energy-producing machinery, the mitochondria, absorb the light energy.



Red and infrared light influences the amount of energy the mitochondria produce and also affects the way nerve cells communicate and receive messages. The amount of light that gets absorbed by a cell varies depending on the energy state of the mitochondria.

One important effect of Light Therapy is dilation of blood vessels, which reduces blood pressure and improves circulation and oxygen delivery. This reduces pain, and repeated use over time is often associated with regeneration of tissue, reduction of symptoms and improvement in patient outlook.

# Muscle Spasms, Aches, & Stiffness

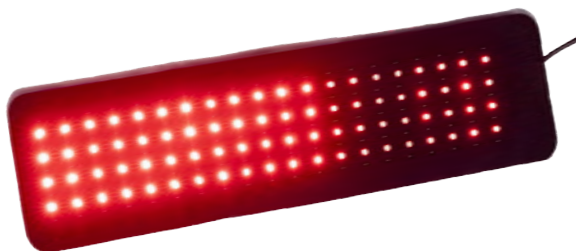
Light Therapy dramatically stimulates muscle trigger points and acupuncture points, non-invasively providing musculoskeletal pain relief.



Acute conditions will respond more quickly than chronic conditions.

**For acute conditions:** users often begin 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.



# Why Choose HealthLight

HealthLight devices are easy to use and non-invasive.

Our devices offer drug free-pain relief treatment. Third-party testing demonstrates superior effectiveness to other brands.



HealthLight devices offer an efficient and comfortable experience for patients. Therapy pads are designed in different sizes and shapes to allow application to many areas of the body. 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 areas.

**Research backs the effectiveness of Near Infrared Therapy to provide pain relief.** The NIH has tracked more than 3,000 studies that support this claim. HealthLight uses cutting-edge, clinical strength and FDA-cleared technology to provide pain relief.

# Effectiveness Comparison

Here is a summary of recent third-party testing of HealthLight devices against those from other brands. You'll notice HealthLight devices deliver the most energy, or joules, to the treatment site during a 20 minute session.

Comparing Information	HealthLight 132	InLight 132	HealthLight 180	InLight 180	HealthLight 264	NeuroCare 264	HealthLight Foot + Ankle	Anodyne Freedom 300
Dosage Per 20 Min Session (Joules)	2,336	1,577	3,513	660	5,629	1,577	3,040	1,300
Total Power (mW)	1,946	1,314	3,009	550	4,691	1,031	1,925	1,081
ON Time Percentage	50%	35%	50%	35%	50%	50%	50%	50%
Pulse Randomization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Infrared LEDs	72	72	100	100	144	144	70	300
Number of Red LEDs	60	60	80	80	120	120	52	0
Proximity to Skin	Contact	Contact	Contact	Contact	Contact	Contact	Contact	Contact
Total Area (cm2)	184	184	282	282	361	391	478	131
FDA Listed	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
ISO Certified	Yes	No	Yes	No	Yes	No	Yes	No
Manufactured in USA	Yes	No	Yes	No	Yes	No	Yes	Yes



Testing also shows that HealthLight devices operate near body temperature, while other devices can operate at 120 degrees or more, burning the skin.



# HealthLight Products and Their Uses

HealthLight's comprehensive line of light therapy pads are designed for both in-office and at-home use. Controllers support the simultaneous use of 2, 3 or 6 pads.



## 2, 3 & 6 Port Controllers



Foot & Ankle 122 Diode Pad



Large Pad - 264 Diodes



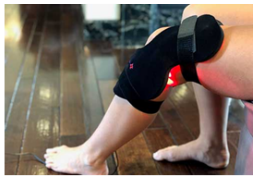
Medium Pad - 132 Diodes  
or Small Pad - 90 Diodes



Long Pad - 180 Diodes  
or Large Pad - 264 Diodes



Medium Pad - 132 Diodes  
or Small Pad - 90 Diodes



Knee/Shoulder Pad  
204 Diodes

## 11 Shapes and Sizes of Therapy Pads

[VIEW ALL PRODUCTS](#)



## **Operating HealthLight Pads**

- 1. Plug it in**
- 2. Strap it on**
- 3. Push the button**

Ensure pad has direct contact with skin.  
Pads automatically shut off after 20 minutes.



**20 Minutes, 3 or more times per week is  
often needed to experience change.**

# Enhancing Clinic Revenue

Many clinicians of various types are finding HealthLight the key to practice differentiation and revenue growth.

Light Therapy is combined with other treatment modalities for superior results. Pads can be purchased at wholesale and sold to patients for home use, providing continuity of treatment.

HealthLight makes this easy, providing a variety of incentives and a full suite of complimentary marketing materials.

### PADS FOR PATIENTS:

- Continuity of Care at Home
- Additional Revenue Stream
- Decrease Prescription Meds
- Differentiate Your Practice

Clinic purchases pads at wholesale prices and sells to patients at MSRP.



Buy 5 kits in 6 months - get an additional kit at *no cost*

#### Build your own kit

- Buy any 2 pads, get a 2 port controller free
- Buy any 3 pads, get a 3 port controller free
- Buy any 6 pads, get a 6 port controller free

The free kit can be a 2 port & 2 pad kit, of any kind.  
Must be equal or lesser value to pads already purchased.

## Pads For Patients Program

### Products and Revenue

#### Example

#### Pricing for Neuropathy Kits for Patients:

Each kit consists of:

2 Foot and Ankle pads and a 2 port controller (free)

Buy 5 kits get 1 FREE (can be repeated)

Total 6 Kits

Wholesale	Retail	Profit
\$990 (ea kit)	\$ 1,750	\$ 760 ea
FREE	\$ 1,750	\$ 1,750
\$ 4,950	\$ 10,500	\$ 5,550



# Testimonials from Patients and Clinicians

We constantly hear from patients and healthcare providers about the profound results they experience with HealthLight products.

Oftentimes, those who have "tried everything for the pain" settle on HealthLight products as a solution for their chronic pain. Click on the images below to view the testimonial videos online.

## Chiropractic Use



Florida chiropractor Dr. Keith Volstad relies on HealthLight to achieve outstanding patient outcomes and grow his practice.

He provides HealthLight therapy pads to his patients to use at home.

## Leg Pain



Melissa Wilson was having non-stop pain in her shin that kept her up at night and prevented her from enjoying her daily walks.

Her new HealthLight therapy pad is now solving the problem.

## Leg & Body Pain



Ben Richards was badly wounded in an IED attack while serving in Iraq. He spent years in severe pain, but has finally found relief with HealthLight light therapy products. Please join us in thanking Ben and other heroes for their service.

## Lymphatic Drainage & Pain Relief



California Massage Therapist Theresa Gamlin relies on HealthLight for help with clients who need lymphatic drainage or pain relief.

She says she her clients notice a difference.

## Leg & Hip Pain



Jeannie had un-ending hip and leg pain following an accident that left her seemingly unable to function. She got immediate results from LED light therapy pads from HealthLight and is back to her old life.

## Foot Pain



Bill Manning was unable to enjoy hiking and skiing near his mountain home due to unending foot pain. HealthLight devices changed all that.

## Leg Pain



HealthLight's Andy Friedmann got in a scary bike accident and had leg pain afterwards. He found rapid relief from a week's use of a light therapy device.

## Feet & Leg Pain



Donald Althoff was unable to play golf, as he suffered constant pain in his feet and lower legs. His symptoms are much improved

## Feet & Leg Pain



Beth Dawson thought she was headed for a wheelchair. After a short time using HealthLight, Beth was back on her feet.

[VIEW ALL TESTIMONIALS](#) ▶

## **I Frequently Asked Questions**

### **What is infrared light therapy?**

Decades of research found that certain wavelengths of light within the red, blue 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. Light therapy 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? 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.

### **Why do some pads have red light vs. blue lights?**

The type of light correlates with how deep the light penetrates the skin. Blue lights tend to be used for surface level or just underneath the surface penetration. Red lights penetrate deeper into the skin and increases bloodflow.



## Questions you should ask when researching a light therapy device

There are multiple manufacturers and products available. Know before you buy.

### What are the joules delivered to the skin?

Joules are the measurement of light energy emitted by the Light Therapy device to the treatment site. Testing shows HealthLight pads deliver the highest level of joules when compared to competitive brands. **This means more effective treatment.**

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

Recessed LEDs lose power as the light travels to the surface. **HealthLight pads all have specially-focused LEDs at the surface.**

### Does the temperature of the pad rise above body temperature?

Depending on a patient's condition, if the pad is hot or getting hot, the patient may not feel it. It is better to have a pad that stays around body temperature. Some pads even burn the skin.

**All HealthLight pads operate near body temperature.**

### Are the pads manufactured in the USA?

Quality of the electronic components, diodes, neoprene and controllers is very important. They determine the durability and long-term effectiveness of the devices. **HealthLight pads are manufactured near Chicago in a state-of-the-art 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 USA. Even some pads sold in healthcare offices may not be cleared. Ask before you buy.

**HealthLight pads are FDA-listed and are only sold direct.**

### How long is each treatment?

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

GOT QUESTIONS?

**CONTACT US!**

# **I Bibliography**

1. *Mechanisms and Mitochondrial Redox Signaling in Photobiomodulation.*  
Photochem Photobiol, 2018. 94(2): p. 199-212  
<https://pubmed.ncbi.nlm.nih.gov/29164625/>
2. *Mechanisms and applications of the anti-inflammatory effects of photobiomodulation.* AIMS Biophys, 2017. 4(3): p. 337-361  
<https://pubmed.ncbi.nlm.nih.gov/28748217/>
3. *Photobiomodulation induces in vitro re-epithelialization via nitric oxide production.*  
Lasers Med Sci, 2018. 33(5): p. 1003-1008  
<https://pubmed.ncbi.nlm.nih.gov/29349512/>



# Author Biography

We are always happy to answer your questions or discuss how Light Therapy might help you.

## ABOUT HEALTHLIGHT

HealthLight has been manufacturing photo-modulated (pulsed, light emitting diode) devices also known as low-level light therapy (LLLT) devices for over 16 years. The infrared and visible red LEDs are the heart of the HealthLight Therapy systems, providing gentle but powerful non-coherent light.

HealthLight devices are for temporary relief of minor pain, minor muscle and joint aches and stiffness, and to temporarily increase local blood circulation. They are not intended to treat any disease.

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<https://healthlightllc.com/>

