

# What is Red Light Therapy?

People around the world are incorporating red light therapy (RLT) into their wellness routines for a good reason! Unlike most fads that come and go, red light therapy (AKA photobiomodulation) is here to stay. There are over 2000 published studies supporting its broad spectrum wellness benefits, including:

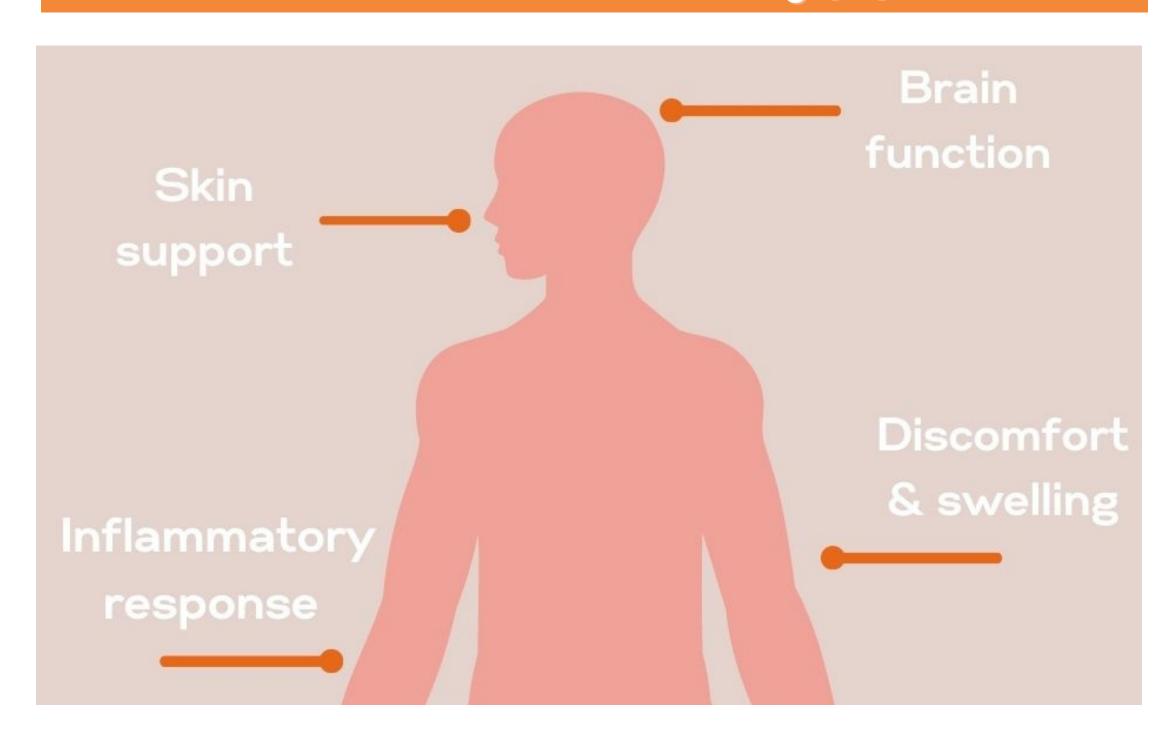
Skin support and collagen production [1, 2]

Breakouts [3]

Cognitive function [4]

Inflammatory response [5]

Discomfort and swelling [6]



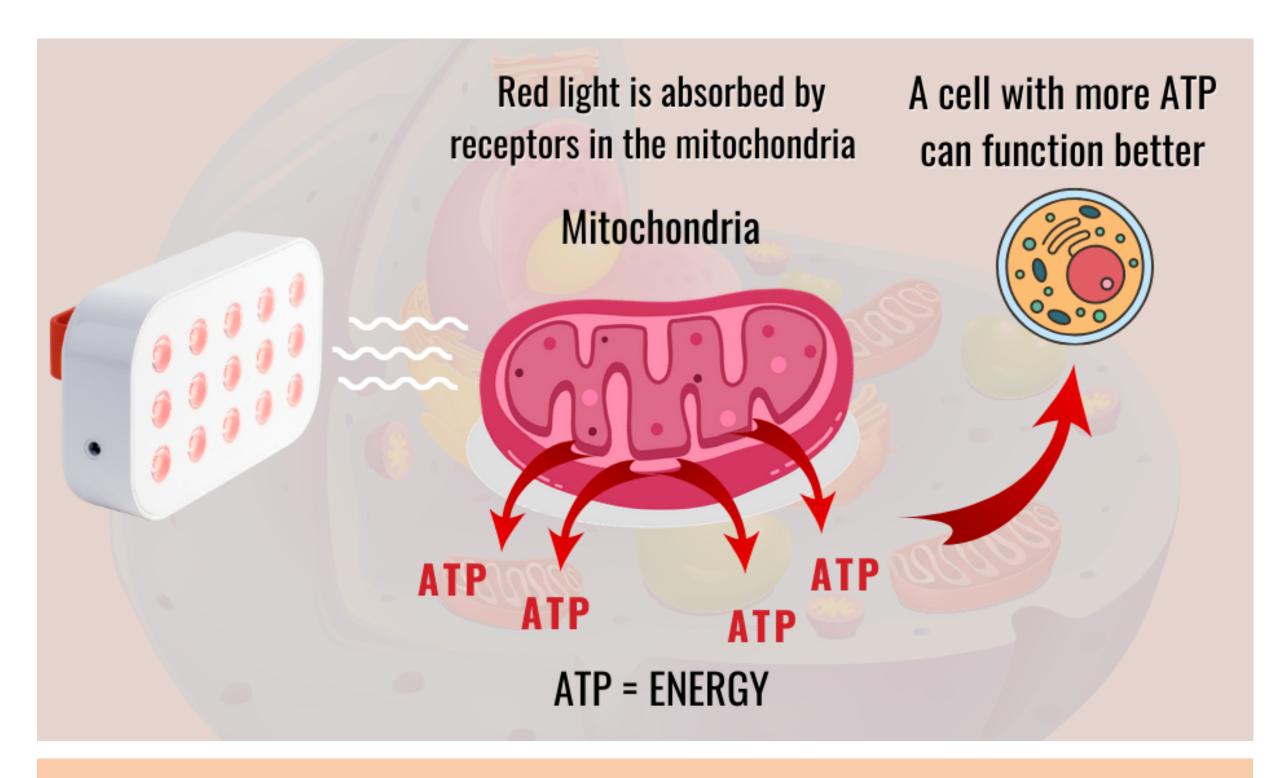
BUT – not all red light therapy devices are created equal. (And no, you can't just put a red-colored light bulb in your lamp and shine it at your body. You'll find out why on page 5.)

Read on to discover some key mistakes people are making when it comes to red light therapy.

## Do I need Red Light Therapy?

#### It sounds too good to be true! But is it?

Red light therapy (RLT) is a safe and non-invasive way to "recharge" your cells by activating their energy reserves - the MITOCHONDRIA.



Think back to your high school biology classes. You were likely taught that the mitochondria are the powerhouses of your cells. They produce ATP molecules that fuel cellular energy. *Are you with us so far?* Now imagine a flashlight that starts to dim when its batteries are low.

Your cells are just like that flashlight – they slow down and "run out of energy" when the mitochondria don't produce enough ATP. This shift can pave the way for decreased vitality and a diminished state of health.

How Red Light Therapy Energizes Your Mitochondria: Red and near infrared (NIR) light travels through the skin and activates the mitochondria (via receptors called cytochrome c oxidase), enabling them to produce more ATP.

Why Cellular Energy is Important: Cells with more ATP (energy) function better and become more resistant to breaking down. [7]

So, what does this mean? Simply put – mitochondrial function is vital for maintaining and protecting your body's vibrant energy and overall wellness. The more they soak up red and NIR light, the more energized and healthier you feel!

## Benefits of Red Light Therapy:

Evidence-based research on red light therapy indicates measurable benefits for everything from skin appearance and elasticity to joint function – plus, there are an increasing number of anecdotal user testimonials for much more. Learn more about the most observed and researched uses of red light therapy.



Supports collagen production, skin texture, elasticity & appearance [8]



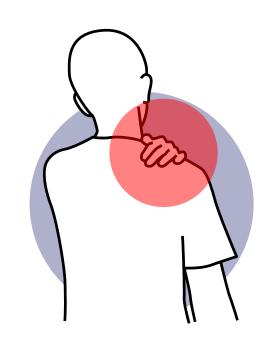
Supports the body's natural healing and recovery processes
[9]



Supports optimal joint and tendon function [10]



Supports muscle recovery and addresses discomfort [11, 12]



Supports immune modulation and stressor response [13]



Supports balanced moods [14,15,16]

# Discover the wavelengths

#### Why is LUMEBOX® red light therapy different than a redtinted light bulb?

Short answer – wavelength and energy! Red-tinted incandescent bulbs don't provide the same therapeutic output. They aren't powerful enough to penetrate tissue and reach the mitochondria. A red-tinted incandescent bulb in a lamp can change the vibe of your room (and help you avoid exposure to blue light at night), but that's about it.

Red light therapy devices are more than just colored lights. They provide powerful healing energy that can level up your wellness routine.

#### Ok - so which wavelengths have been shown to be beneficial?

The two most studied wavelengths are red (around 660nm) and Near Infrared (NIR) (around 850nm).

#### Red benefits:

At 660 nm, red light is visible to the human eye. This wavelength penetrates the upper skin layers and is beneficial for the following concerns:

- Overall skin rejuvenation, blemishes, and wrinkles
- Topical wounds, cuts, and bruises
- Mood & circadian rhythm support

FYI: Red light addresses the effects of blue light exposure, which can impact sleep cycles.

#### NIR benefits:

At 850 nm, near infrared light is invisible to the human eye. NIR penetrates the skin and into deeper tissue, making it beneficial for the following concerns:

- Muscle and joint discomfort
- Post-workout recovery
- Balanced response to inflammatory stressors

LUMEBOX® innovative technology provides red light and NIR wavelengths, which can be used together for maximum benefits!

## Common mistakes:

There are a few important factors to consider when choosing a red light therapy device. Not all devices are created equal.

# 1 Low Irradiance

This is probably the most common reason people don't see benefits. In order to get results, an adequate 'dose' of light needs to reach target tissue. Prioritize companies that transparently outline key metrics like irradiance—the crucial measure of light energy delivered to target tissues. The higher the irradiance, the greater the light dosage, which reduces treatment time and improves tissue penetration.

Many factors can affect the irradiance, including the distance from the light source and the device's power. When the power source is further away, the irradiance is decreased. This relationship emphasizes why selecting a unit with the highest power is a good idea, as it maintains an effective light dose even at extended distances.

If you choose a portable unit, you also want to ensure the device is made with high-quality materials and has an extended battery life.

# 2 Poor Quality

Check whether the company is registered with the FDA and complies with its required quality and regulatory protocols. The FDA has jurisdiction over the manufacturing/distribution of the registered devices and monitors user safety under a program known as MedWatch. Many red light therapy devices on the market are NOT registered with the FDA and are therefore not monitored for quality or safety.

FYI: LUMEBOX® is registered with the FDA and adheres to all compliance and regulatory guidelines.

# 3 No Safety Testing

Choosing a device that has published 3rd party safety testing is essential. As red light therapy becomes more popular, companies may take shortcuts and offer devices that don't provide benefits or, worse yet, are unsafe!

EMF exposure is also a concern when using an electronic wellness device. Choose a company that tests for EMFs and provides results for readings at 0 cm (at the surface of the device). Many companies report 0 EMFs at 6 inches from the surface of the device – but this distance does not accurately measure the typical usage distance, which is much closer.

FYI: LUMEBOX® devices are 3rd party tested for EMF exposure at 0 cm. Read on to find out the results on page 8.



Choosing the best red light therapy device depends on your personal needs. There are big panels, small portable units, and more targeted options, such as face masks. These serve different purposes. Targeted devices like facial wands or masks may provide good results for the skin; however, they lack the versatility of multi-functional use and lower power usually means you cannot use it on other areas like joints. This can become expensive if you have to buy a specific device for each indication.

So consider the following questions before making a purchase:

- What do I want to use red light therapy for?
- Will I likely use my device relaxing on the sofa or in bed? Or do I have time to stand in front of a panel everyday?
- Do I want to use it when I travel?
- Do I need the flexibility to use it on multiple areas of concern?

If you answered "yes" to the last three question, then look for a portable device that has high irradiance so you can adapt it to treat multiple concerns, rather than spending hundreds of dollars to treat only one concern.

# Why LUMEBOX?

LUMEBOX® is 3rd party tested for irradiance which measured at 140 mW/cm2 for NIR and 125 mW/cm2 for red light - 80% higher than the leading brand.

LUMEBOX® covers 25% more surface area than most portable devices, making it easier to address larger areas of concern. We also use the highest-quality components. Each device is powered by a state-of-the-art battery and uses premium LED bulbs.

LUMEBOX® is also 3rd party tested for EMFs in an independent lab (as opposed to using a handheld EMT meter, which can generate inaccurate results). At 0 cm away from the device, LUMEBOX® showed 0.2uT, which is very low. Common household appliances like hair dryers generate 50 to 100 times greater levels of EMFs.

### **LUMEBOX®** Outperforms

Independently Tested to be More Powerful than Leading Brand



We hope this guide answers some of your questions about red light therapy!

Please visit our website and follow us on social media for more information and exclusive tips for using red light therapy in your daily wellness routine.

Instagram: <u>Olumeboxpro</u>
thelumebox.com

# Shine the Light on Wellness with LUMEBOX®

LIMITED-TIME OFFER: <u>Save \$250</u> on your go-to solution for vibrant skin & lasting wellness benefits

\$599 - \$349

#### What's inside the box:

Handheld red light

Travel case

Battery

Removable comfort-grip accessory

A/C adaptor

Manual

Protective eyewear

#### Illuminate your life with the power of red light therapy!

#### **Features:**

- Backed by research
- Easy to use and portable
- Low EMF output
- Red & near infrared (NIR) wavelengths

#### **Benefits:**

- Better mood & energy
- Glowing, healthy skin
- Faster recovery
- Reduced soreness & discomfort

Don't wait – Enhance your daily wellness with LUMEBOX® today!

### Disclaimer:

Medical Disclaimer: The information contained in this guide is intended for educational purposes only, has not been evaluated by the FDA (U.S. Food and Drug Administration), and should not be used as medical advice. Testimonials are not a guarantee of results you or anyone who uses LUMEBOX will get because your success depends entirely on your individual circumstances, and the studies on red light therapy shared were not specifically performed using LUMEBOX. Please do not change your medical treatments or lifestyle without consulting your physician first.

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