

Red Light Therapy Benefits, According to Science

Improve Your Workout Recovery, Reduce Inflammation, and Improve Skin Health With Red Light Therapy

Rebecca Strong | April 27, 2024

There's a good chance that while scrolling through your social media feeds lately, you've come across someone sitting, standing, or lying in front of a glowing red panel (looking at you, Mark Wahlberg).

Red light therapy may be trending, but it's no passing fad. There's a wealth of emerging research to back up the benefits — which, by the way, may include reduced inflammation, improved skin appearance, increased energy, and faster muscle recovery. The best part? As far as we know, there aren't really any side effects when you use it correctly, either.

Red light therapy — also known as low-level light therapy, photobiomodulation, and red LED light therapy — comes in lots of shapes and sizes, including face masks, desk lamps, handheld wands, and full-body booths and beds. But how does red light therapy work? Is it right for you? And what kinds of perks can you expect from trying it?

Here are some things to know before jumping on this trend.

What Is Red Light Therapy? And How Does Red Light Therapy Work?

Red light therapy involves exposing your face and/or body to red and near-infrared light — more specifically at wavelengths between 620 and 750 nanometers.

“These wavelengths are chosen because they are known to be absorbed well by the skin cells and provide a variety of benefits,” Erica Marie Gatt, esthetician and Founder of EM Skin, tells AskMen.

According to Gatt, light in this wavelength range can penetrate the superficial layer of the skin and stimulate cellular energy production within the mitochondria. (Quick science refresher: mitochondria are known as the “cell powerhouses” because they produce the energy necessary to keep the cells healthy and functioning.) When mitochondria have more energy, the cells tend to function more effectively and efficiently, repairing themselves better and more quickly.

As for the history behind this game-changing therapy, it was originally discovered in 1967 by a Hungarian physician named Endre Mester, who observed that low-level laser therapy helped to promote wound healing and hair growth in rats. He then began using red light therapy to treat patients with persistent skin ulcers that weren't healing.

The Benefits of Red Light Therapy

Numerous studies have explored how red light therapy may positively impact human health. (Hey, if it's good enough for Dave Asprey — the father of biohacking — it's good enough for us.)

Here are some research-backed benefits of red light therapy to consider:

- Improved hair growth in people with androgenic alopecia
- Improvement in the appearance of psoriasis
- Reduced appearance of scars
- Reduced pain related to certain conditions, like chronic low back pain and fibromyalgia
- Enhanced cognitive health
- Reduced inflammation after injury
- Increased production of collagen and elastin in the skin for anti-aging benefits
- Reduced acne lesions
- Better skin tone and texture
- Faster wound healing
- Faster workout recovery and enhanced athletic performance (by repairing and regenerating damaged muscle tissue and decreasing inflammation after exercise)

Who Should Use Red Light Therapy — and Who Should Not?

“Red light therapy can be beneficial for a wide range of people, including those looking to improve skin health, athletes seeking faster recovery from workouts, and anyone experiencing chronic pain or hair loss,” says Alexis Pfropfer, a licensed esthetician and owner/founder of *asthetik skincare and asthetik spa*, Gatt and **Dr. Jody Alpert Levine**, a board-certified dermatologist at *Plastic Surgery & Dermatology of NYC*, say they’d recommend red light therapy for anyone struggling with:

- Folliculitis
- Sun damage
- Psoriasis
- Rosacea
- Eczema
- Acne
- Thinning hair
- Razor burn
- Aging-related changes in the skin

While red light therapy is generally safe for most people, it may not be suitable for people with certain medical conditions, like epilepsy and thyroid disorders, says Pfropfer. **According to Dr. Levine, you should also avoid it if you have photosensitivity — whether from a condition such as Lupus or a medication.**

“Consult with a healthcare professional if you have any concerns or underlying medical conditions,” adds Pfropfer.

Are There Any Risks With Red Light Therapy?

Experts agree that red light therapy appears to be safe for most people. It doesn’t involve any cancer-causing UV light, and there’s no research to suggest any worrisome side effects — as long as it’s used as directed, of course.

Always follow the manufacturer’s instructions when using at-home red light therapy devices. To maximize the potential benefits and minimize any risks, it’s typically advised to only use them for short time windows — say, five to 15 minutes. Using these units for too long may damage your skin. Make sure to wear protective goggles to shield your eyes when using red light therapy devices, too.

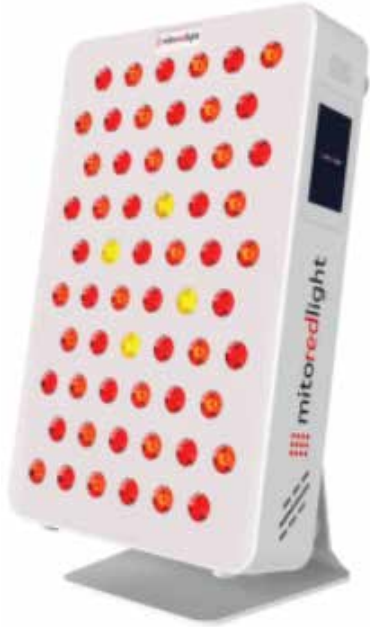


The Best Red Light Therapy Devices

Some dermatologists and doctors offer in-person red light therapy, but treatment with these medical-grade devices can get expensive and typically isn't covered by insurance.

Luckily, there are lots of red light therapy devices you can use right at home. But not all options are created equal. Here are some red light therapy devices that experts deem worth the investment.

Best Overall: MitoPRO 300X



Mito Red Light is one of the leading makers of at-home red light therapy devices. What makes this company stand out is that the lights are all third-party tested and validated by Independent Testing Laboratories, and also FDA Class II registered. I like that they also have such a wide range of products to meet your health goals, needs, and budget — from small tabletop panels just for your face to full-length panels that can cover both sides of your body.

The MitoPRO X Series, which just launched in 2024, is super user-friendly — featuring a touchscreen interface, alarm function, and brightness control. The MitoPRO 300X fits perfectly on my desk, and I use it daily on my face as part of my morning routine. Since it's compatible with the Mito Red mobile app, I can quickly and easily adjust the intensity or wavelengths during my sessions as well as track my usage and the benefits I'm noticing over time.

The Celluma devices are on the pricier side, with most costing \$795–\$1,995. That said, if you have a specific goal for your red light therapy treatment, you may want to check out their product line. For instance, Celluma HOME is ideal for joint and muscle pain, while Celluma RESTORE is geared toward hair growth.

“The Celluma series offers versatile red light therapy devices designed for various applications, including skincare, pain management, and wound healing,” says Pfropfer. “Their flexible, low-profile design allows for comfortable treatment sessions, and they are FDA-cleared for safety and efficacy.”

Best for Targeted Treatment: Celluma HOME / RESTORE



Best Handheld: POLY Go LED



“My favorite handheld LED device is the POLY Go LED,” says Rachel Lozina, a licensed esthetician, laser technician, and founder of Blue Water Spa. “I like that the spot size is rather large so you can encapsulate the entire face in less than 10 minutes. And if you’re using it for a specific area like an enlarged pimple or a burn, five minutes in a specific area is a sufficient amount of time for it to work.”

There are lots of red light therapy masks on the market these days — but Lozina says this one comes out on top for several reasons.

“It’s the easiest and most user-friendly of all the LED lights because it’s hands-free,” she explains. “You can charge it in advance and literally walk around your house and do your dishes or other housework with it on (so long as you don’t mind scaring your spouse). It’s durable enough to get wet and you can also use it on your neck or your hands as well as your face.”

Best Mask: Omnilux LED Contour Mask

