



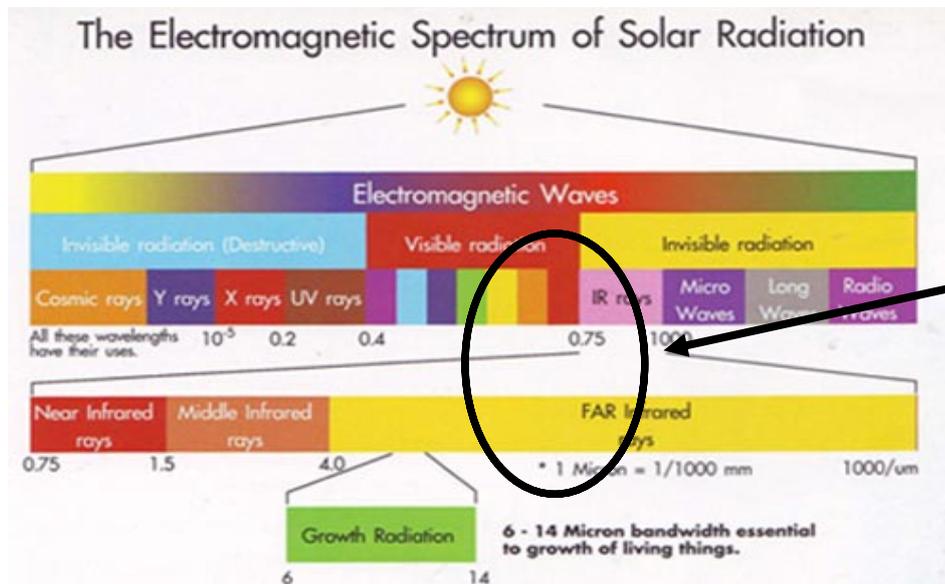
## RED LIGHT AND INFRARED LIGHT THERAPY

### Summary Box

- Non-invasive light therapy
- Benefits: Increases blood flow to the area and promotes healing of muscle, tendon, bone etc.
- Risks: Minimal to none
- You will feel a gentle warmth at most

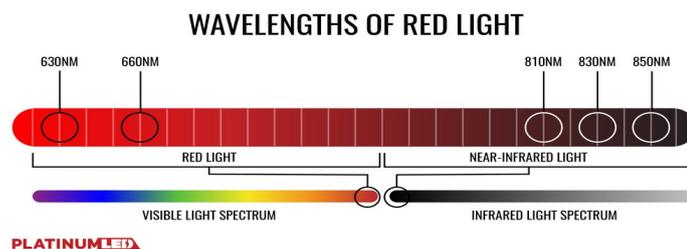
### What it is?

Red light therapy (RLT) is also known as referred to as photobiomodulation or Low Level Light Therapy (LLLT). Red light sits on an electromagnetic spectrum as per the diagram below.



(<http://www.ibho.org/en/whatisfir.html>)

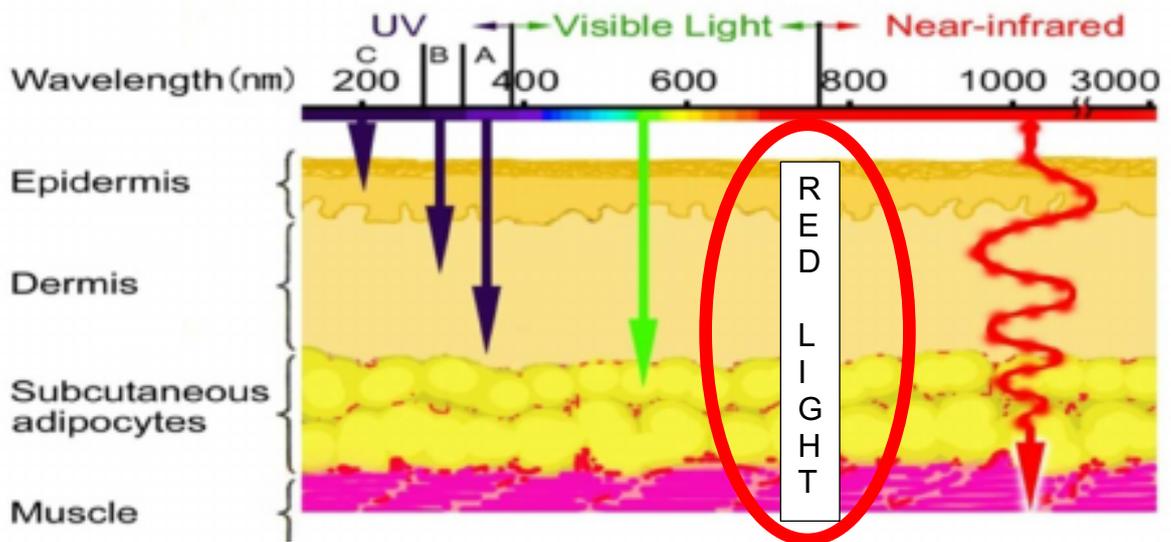
Red light can be visible, transitioning through near infrared (NIR), all the way to invisible (infrared IR) as per the diagram below.



([www.platinumtherapylights.com](http://www.platinumtherapylights.com))

## How does it work?

Visible red light and invisible red light/NIR penetrate to different depths in the body and they both increase the blood flow to that area, which helps with healing.



(Tanaka et al., 2013)

## What are the benefits?

There is a growing body of evidence supporting the numerous health benefits of red-light therapy (RLT).

Visible red light goes in to a shallow level and can help with skin and hair issues such as scar repair, acne, psoriasis, eczema.

Near infrared light goes in deeper and can help with muscle healing, tendon problems, bone repair, neuropathic pain, sleep and infection.

RLT not an instant fix and is a complement to other treatments you may be having.

## What will I feel?

Not much, at most a mild gentle warmth.

## Are there any risks RLT?

The risks are minimal to none and that is what makes RLT so appealing. Your healthcare practitioner will assess you to determine if RLT is appropriate.

## What does RLT involve?

The skin of the affected body area/part will have to be exposed to the light for roughly 10 minutes. The exact dose will be determined by your practitioner.

## Is this really new?

No. Infrared saunas have been popular in Europe for many years and

medicine has been using light therapy for decades in different forms e.g. lasers and PUVA. What IS new, is that now we can provide this therapy without worrying about the risks that lasers and PUVA devices had.

### **Blue light, yellow light and now red light?**

Yes, I know it can be a bit confusing. Blue light is on a different range (450-485nm) on the light spectrum and is emitted by your electronic devices and can adversely influence sleep, whereas yellow light can promote sleep. Red light is different as it has a range of health benefits, beyond sleep.

### **Is red light therapy the same as a SAD lamp?**

No. It is better. SAD lamps work by mimicking dawn and acting as a natural alarm clock to kick start your body rhythms for the day. RLT can be used at any time of the day and has numerous, scientifically researched benefits.

### **Useful resources:**

<https://platinumtherapylights.com/blogs/news/red-light-therapy-side-effects>

<https://joovv.com/pages/science>

<https://redlightrising.co.uk/benefits-of-red-light-therapy/?v=79cba1185463>

### **References:**

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Salehpour, F., Cassano, P., Rouhi, N., Hamblin, M. R., De Taboada, L., Farajdokht, F., & Mahmoudi, J. (2019). Penetration profiles of visible and near-infrared lasers and light-emitting diode light through the head tissues in animal and human species: a review of literature. *Photobiomodulation, photomedicine, and laser surgery*, 37(10), 581-595.

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