

LED & Light Therapies

Photo-rejuvenation (LED) therapy has numerous client benefits. Some of these benefits are unattainable through any alternative treatment regimens.

The benefits for the skin include:

- Increased radiance the (“Photo-rejuvenation Glow”) firms skin lifts aged and tired skin
- More consistent skin coloration and complexion
- Increases moisture retention
- Increases circulation
- Promotes collagen production for plumper, more youthful looking skin
- Increases oxygenation and restoration of the skin’s natural cellular activity, which keeps it renewed and fresh
- Increases lymphatic system drainage which detoxifies the skin tissue for a healthier look and feel of younger skin
- Reduces inflammation in skin conditions such as acne
- May minimize sebum production by normalizing the skin-helping control acne breakouts

The healing power of infrared light therapy also decreases skin flaws:

- Acne
- Psoriasis and eczema
- Herpes Sores
- Blemishes
- Age spots and photo hyperpigmentation Skin redness, including Rosacea
- Fine lines due to sun damage
- Periocular wrinkles
- Enlarged Pores
- Coarse skin
- Mottled complexion
- Skin laxity
- Skin Rejuvenation

Photo-rejuvenation effects last for 30 to 90 days

- A 30-minute maintenance treatment is required following the initial series of treatments.
- The exact amount of time between maintenance treatments depends on the quality of the skin.

Photo-rejuvenation has no reported side effects

- However, LED used indiscriminately with other products may induce side effects related to those products.
- You must make sure that the products you are using on your clients are safe and non-allergic.
- Many skin care specialists with experience in Photo-rejuvenation believe that the application of light makes other products more effective. Studies show that photo-rejuvenation increases the uptake and penetration of products.

Photo-rejuvenation is pain-free

- It is an attractive bonus in attracting clients who fear microdermabrasion, collagen injections, Botox, or laser resurfacing due to discomfort.
- Some clients may experience brief warmth or “glow” following treatment.

Photo-rejuvenation has no recovery time

- Your clients can put their makeup on immediately after treatments. They can go in the sun and water.

Photo-rejuvenation has the broadest range of application

- You can treat acneic clients on Accutane or Retin-A, and other skin conditions not manageable with microdermabrasion or chemical peels.

You may combine photo-rejuvenation with microdermabrasion, peels, products, etc. It will only enhance the benefits of these other treatments. Chemical peels and microdermabrasion may be applied before or after LED light therapy to complement the treatments.

The cost of treatments

- The spa photo-rejuvenation treatment can equal the benefits of similar therapies using laser or IPL but at less than 1/2 the price.
 - Produce a diffuse a uniform light that penetrate more deeply than laser light and is easily applied uniformly over the area of treatment. The safety in the design means that procedures are without pain or discomfort, there is no recovery period or “downtime,” and often the results are immediate.
 - There are many benefits:
 - Reduction in fine lines, pore size, and dilated capillaries
 - The skin appears smoother
 - Evening of pigmentation
 - The skin is thicker and firmer
- Blue LED Light Therapy ~465 nm has proven very effective against more difficult acne cases, and instances where an ongoing acne treatment appears to have stalled. In clinical studies, blue light has been shown to generate singlet oxygen which attacks the bacteria that causes acne.
- Lasers are well known for their ability to produce specific single light frequencies. But laser's harmful side effects are also well known.
 - Their high power-density and focused energy generate heat that damages sensitive skin tissue. It's the primary mechanism of the laser which evokes a healing response in the skin.
 - There is significant recovery time, and sometimes there is scarring associated with the procedure. Laser equipment is also expensive and bulky, and therefore, so are laser procedures.
- Red LED ~ 640 nm are unique in their ability to produce the same specific light frequencies as a laser without damaging tissue.
- Infra-Red ~ 880 nm can penetrate deeply into the tissues for healing and pain management.

The History of Light Therapy

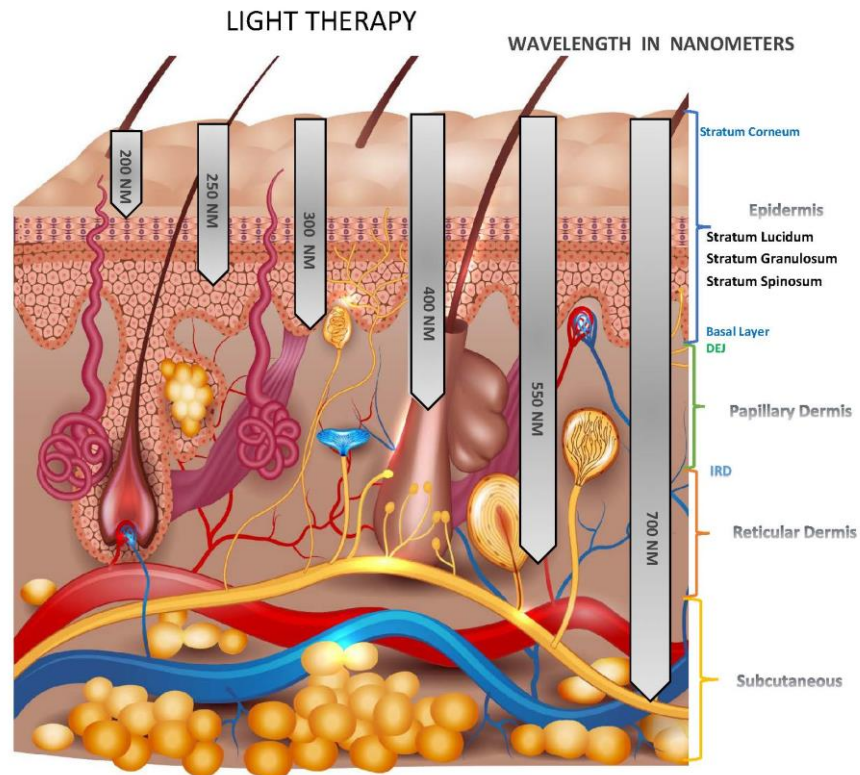
Light therapy dates to the Greeks when it was discovered that heliotherapy (exposure to light), could be beneficial to health.

- Today, we know that one benefit of light exposure is the skin's production of vitamin D, one of the healing vitamins that is essential to good health.
- The Greeks may have been observing this effect, though they didn't know about vitamins.
- They did not know that exposure to some of the sun's wavelengths, like UV, can be very harmful.

In the 19th Century, Dr. Niels Finsen, a Danish physician was awarded a Nobel Prize for demonstrating the beneficial effects of various wavelengths in the treatment of tuberculosis. This same technology has proven to be useful in the fields of dermatology, neurology, and physiotherapy.

Forty years of independent research have shown that Light Therapy has powerful therapeutic benefits to living tissue.

- In Europe, in the 1960's, it was noted that specific single wavelengths had excellent therapeutic effect on tissues through a process called photo-stimulation. One example is the practice of "light-treating" newborn babies for jaundice.
- More recently, cancer researchers have noted that a single red-light frequency combined with a topical cream kills certain types of skin cancer cells.
- Researchers also noted that it stimulated skin tissue to regenerate and improve its appearance.
- Circulation and fibroblastic activity increase; additionally, collagen production and healing are promoted. This effect has produced very positive results in the treatment of Rosacea, anti-aging and sun damage.



- The weightless environment in space slows cellular growth, in part because it depends on gravity. NASA researchers examined the use of light to penetrate deep into tissues and found that it stimulated cell growth and promoted healing in zero-gravity environments.

Contraindications to LED:

- Pregnancy – studies have not sufficiently assessed the risk to pregnant women and their babies. Therefore it is not recommended.
- Epilepsy – certain light frequencies can trigger an epileptic seizure
- Thyroid condition – if you suffer from a thyroid condition or are on thyroid medication
- If you are photo-allergic or are taking any medication that causes light sensitivity, such as tetracycline.