LED Light Photo - Therapy

What are the Benefits of LED?

Skin Unique’s Multi-light LED Panels. Hand held system see below.

- Activates fibroblast cells which create collagen and elastin
- Restores skin’s natural cellular collagen activity
- Progressive anti-aging treatment rather than aggressive

- Skin texture is smoother, fuller and plump
- Sooth irritated, red conditions
- Reduces the appearance of fine lines and wrinkles
- Excellent for all skin types, color and skin conditions

- Stimulates and activates metabolic function in skin cells
- Improves the appearance of aging and sun damaged skin
- Reduces melanin production, which causes brown age spots and hyper-pigmentation

- Minimizes large pores
- Assists in killing bacteria in the skin (rosacea and acne types)
- Helps reduce inflammation
- No downtime or peeling

- LED Light Therapy treatments stimulate micro-circulation
- Recommended for post-operative healing
- Reduces skin degradation
- Excellent in reduction of newly formed scars (red in color)
- Improves muscle & joint aches, sprains, back pain, muscle spasms, and the pain & stiffness associated with arthritis
The **RED LED LIGHT 630 nm** - encourages collagen and elastin regeneration by stimulation fibroblast activity in the skin (*increased fibroblast activity* is responsible for collagen formation and tighter, younger looking complexion). It also helps to *increase blood and oxygen flow* to the skin and capillaries, therefore increasing cellular metabolism and strengthening the capillary walls, fantastic for Anti-ageing treatments for its tightening benefits. The RED light is also an excellent treatment for scarring, post-inflammatory (surgeries), and *inflammatory condition* in every type of skin condition, acne, hyper-pigmentation and rosacea.

The **BLUE LED LIGHT 460nm** - is approved by FDA for acne as it *destroys bacteria on the skin* and prevents bacteria from forming, thus reducing future scars, instills the confidence in person's skin which in turn provides healthy self-esteem and brighter future.

The **GREEN LED LIGHT 525 nm** - uses unique low intensity green light to counteract effects of aging, improve skin metabolism, treat pigment is a result of broad absorption spectrum of melanin, solar solar lentigines and ephelides (*pigmentation and freckles*), as well as providing an overall hydrating effect. The green LED treatment will *lighten hyper pigmentation spots* on the face and neck area. The green light will stimulate cell growth enabling your skin to repair the affected area. This will lighten skin and alleviate dark spot on the surface of skin, leaving a bright complexion Subjects in various industry trials have reported an overall lifting and hydrating effect, an improvement in skin tone and texture, an evening out of pigmentation, a smoothing of fine lines and wrinkles (additionally aids in the reduction of the appearance of scars).
The **AMBER LED LIGHT 590nm** - Amber light is used in the cosmetic treatment of burns (such as sunburns) to reduce the appearance of redness, swelling as well as other inflammation conditions such as rosacea and eczema. Yellow light therapy also provides general cosmetic facial rejuvenation by assisting with the reduction of the appearance of wrinkles and fine lines. LED photo modulation at this frequency has been used alone for skin rejuvenation in several studies. Use LED Yellow light to assist in the reduction of the appearance of wrinkles and fine lines.

The **INFRA-RED LED LIGHT 880nm** - the invisible light is built in within the red light panel and Red light hand held unit as well. It acts synergistically with the red LED light to achieve optimum efficacy in photo rejuvenation. These two LED lights in combination deliver maximum skin rejuvenation, ideal for deeper lines and wrinkles. The Infra-red light is strongly absorbed within Fibro-myocytes promoting alignment and increases tone in the newly produced collagen bundles. The composite effect leaves the skin fuller and lighter in appearance, increased oxygenation and removal of toxins with more glowing appearance.

### Clinical Effects of LED Beauty Therapy:

**Deep Penetrating Far Infrared Light** remove Wrinkles, Crow’s Feet, Sun Damage, Aging spots and Blemishes, Diminishes Pore Size and improves the texture of the Skin.

**Increasing vascularity (circulation):** stimulating the formation of new capillaries, replacing those that have been damaged, thus speeding up the healing process by carrying more oxygen and nutrients, and also carrying away more waste products

**Increasing RNA and DNA synthesis:** growing new cells and replacing damaged cells more promptly of the lymph system, thus dramatically reducing recovery time

**Increased lymphatic system activity:** increasing lymph vessel diameter and the flow
LED Light Therapy for Acne

Blue and Red LED lights are also known as photo therapy or photo-bio-stimulation - an effective skin care technology that has been widely applied for acne solution.

Scientific research reveals that light energy at specific frequencies can actually stimulate specific physiological functions of the skin, and low-energy light technology like LED (Light Emitting Diodes) can also deliver sufficient energy to stimulate a response from the skin to heal damaged cells. It is commonly known that the red light is particularly effective with inflammation and anti-aging and the blue light is applied to fight acne.

Narrow-band, high-intensity blue-light (405 to 420 nm) is FDA approved for treating all types of acne. Acne develops from an abnormal amount of bacteria, mainly Propionibacterium acnes (P. acne), which can cause inflammatory conditions. This bacterium produces an organic compound, Porphyrin. When exposed to blue light, Porphyrin generates singlet oxygen that and kills the bacteria responsible for acne. Blue light can effectively treat some inflammatory acne vulgaris that does not respond to other acne treatments, especially for darker skin. Blue light acne therapy is safe and non-invasive.
Why LED for Aging Skin?

NASA’s medical experiments have demonstrated that red light at 633 – 640 nm has been found to increase collagen production by five times. Collagen is the protein responsible for maintaining skin’s elasticity and firmness, and is also responsible for repairing damaged skin cells. So the red light therapy can effectively improve the appearance of rough skin texture, fine lines and wrinkles and reduce inflammation in acne.

As we age, collagen and elastin components of our skin degenerate, setting the stage for the appearance of wrinkles, creases, folds and furrows. According to the National Institute on Aging, the breakdown is accelerated by sun exposure and gravity (sagging skin). Additionally, skin is easily damaged by external factors such as sunlight, pollution, harsh soaps and chemicals and by internal causes such as cigarette smoke and diet.

According to the American Academy of Dermatology (AAD), aging causes skin cells to produce excess amounts of free radicals - unstable oxygen molecules - that, under ideal circumstances, are removed by naturally occurring antioxidants within the skin’s cells. In aging skin cells, antioxidants are in short supply. The free radicals generated are left unchecked and cause damage to cell membranes, proteins and DNA. These free radicals eventually break down a protein substance in connective tissue (Collagen) and release chemicals that cause inflammation in the skin. It is a combination of these cellular and molecular events that leads to skin aging and the formation of wrinkles.

As we age, each layer of the skin grows thinner, and the uppermost layer of the skin - Stratum Corneum, becomes rough. Collagen is one of the substances that give our skin its youthful suppleness and tautness, but it is also especially susceptible to damage from free radicals. Normally, collagen molecules “slide” over one another, which gives its skin its softness and resiliency. But once they’ve been damaged they become stiff and inflexible and the skin looks "old."
LED Treatments - Deep Penetrating Lights

Laboratory studies have shown that skin cells grow 150-200 percent faster when exposed to certain LED light wavelengths. Independent research for over 40 years has shown LED red and infrared light delivers powerful therapeutic benefits to living tissue. Both visible red and infrared light has been shown to affect at least 24 different positive changes at a deep level. Visible red light, at wavelengths from 630-660 nanometers, penetrates tissue to a depth of 8-10 mm. LED light is very beneficial in treating problems close to the skin's surface such as wounds, cuts, and scars. Skin layers, because of their high blood and water content, absorb red light very readily and deliver enough energy to stimulate a response from the body to heal itself.

LED Photons must be absorbed to produce a biological response. All biological systems have a unique absorption spectrum; this uniqueness determines which wavelengths of light will be absorbed to produce a given therapeutic effect. The visible red and infrared portions of the spectrum have been shown to be highly absorbent and produce unique restorative effects in living tissues, increase oxygen and blood flow, facilitating wound healing. It is thought that light photons are absorbed by the skin and underlying tissues triggering biological changes within the body in a process known as photo-bio-modulation.

Clients report benefit such as:

- Overall lifting, firming, hydrating and plumping effect
- Improvement in skin tone, texture and radiance
- Evening out of pigmentation
- Improvement of couprose and rosacea
- Greatly improved acne conditions
- Smoothing out of fine lines and wrinkles
- Feeling of well being and relaxation
LED for Hair Loss / Alopecia

Is 880nm better than 630 - 700nm? Infrared or Visible Red?

Do note that both visible red and infrared light have been shown to effect at least 24 different positive changes at the cellular level. Visible red light, at a wavelength of 640 - 660 nanometers penetrates tissue to a depth of about 8 -10mm. Infrared light at 880nm penetrates to a depth of about 30-40 mm.

Who Benefits from LED Light Hair Therapy?

- Increases blood supply to the scalp by 50% after only one treatment
- Chemotherapy Patients (directly after treatment)
- Male or female hair loss due to Stress or Medications
- Male or female hair loss due to Excessive Chemical Processing
- LED Stimulates Hair follicles to stop excessive hair loss
- Alopecia Areata
- Menopausal changes
- Postpartum changes
- Hormonal Hair Loss
- Stops the progression of Hair Loss
- Stimulates hair re-growth
- Fine, Limp or Thinning Hair
- Gives fuller thicker healthier hair
- Colors last longer, less fading and oxidation
- Repairs and improves hair quality
- Enhances lasting effects of hair color and perms
- Thickens existing hair and strengthens it
- Hair looks shinier and split ends show remarkable improvement after only a few treatments

Note: LED treatments for hair loss may require treatments for number of weeks, even months, three times per week. Every person is different and times will vary, however you should see definite improvement in 3 month.
LED Photo-Therapy Treatment Pricing:

“LED - Light Facial” acne or anti-ageing

1 session $95       3 sessions $255       6 sessions $499       12 sessions $999

Add-on to any facial, peel or microdermabrasion… $39

“LED Hair Thinning Treatment”

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<td>35 prepaid sessions (3 times per week)</td>
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Facial LED Treatments to reduce eczema, psoriasis and recent scarring:

......................... is the same as for hair thinning treatment

BOOK Your CONSULTATION. Remember that LED Treatments are cumulative. Frequency of treatments depends on your skin condition, acne type, skin damage, depth of sun spots, scars or hair loss and how long it has been there. Over the phone it is impossible to assess any of the above. The cost may be lessened depending on what sessions you choose.

**LED Light Therapy is not for you if you suffer from one of the following conditions:**

- **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