LOW LEVEL LASER THERAPY

The Laser accelerates cellular proliferation, growth and regenerative functions also stimulating faster fibroblastic development to damaged tissue, increasing metabolic activity, which creates higher outputs of specific enzymes, greater oxygen and food particle loads on blood cells. More effective immune responses are induced by Laser light. The Laser reduces the formation of scar tissue following tissue damage from cuts, lymph and blood circulation. The Laser emissions will speed the function of nerves in damaged tissues, which will amplify the action potential in muscles to optimize useful function. LLLT increases metabolism at the cellular level, causing accelerated ATP production; protein synthesis; DNA and RNA formation; and many positive markers.

At the tissue level, circulation increases during and after the administration of LLLT; new blood and lymphatic vessels are formed; and collagen synthesis is enhanced. The biochemical model attributes pain relief to a host of factors, including elevated endorphins and acetylcholine; nerve blockade; decreased synthesis of brady kinin; decreased release of histamine; and increased microcirculation to correct ischemia and acidosis.

LOW LEVEL LASER THERAPY FOR HAIR REJUVENATION

LLLT improves the biologic environment, by increasing blood and lymph microcirculation to the hair roots, removing blockages around the hair follicle, and energizing cells and the hair papillae to take in nutrients faster, allowing the hair to grow thicker and stronger. Clinical studies have suggested that this cellular and sub-cellular activity breaks down the collection of dihydrotestosterone (DHT), responsible for hair loss (alopecia), and sweeps it though the lymphatic system.

LLLT also causes photomodulation stimulation of cells to effect a biochemical change, which includes a growth factor response within cells and tissue as a result of increased ATP production and protein synthesis. Improving cellular and sub-cellular regenerative functions and proliferation, these are some of the effects of this photobiostimulation, and these are some factors associated with LLLT, providing positive benefits to the hair, follicles and papilla for hair rejuvenation.

LLLT increases cellular metabolism, blood circulation and oxygen supply to the tissues (scalp), hair follicles and papillae, this helping to carry more essential nutrients where exposure to LLLT energy subsisted. As a result of the increased blood flow microcirculation, toxins and waste products are more readily taken from the hair papillae and follicles. LLLT will also stimulate and accelerate hair growth by reducing excessive levels of 5-alpha reductase (enzyme) and DHT. Testosterone is converted into DHT in various tissues of the body and skin. The enzyme 5-alpha reductase converts testosterone into its more potent form of DHT. DHT is responsible for causing hair loss known as androgenetic alopecia. 5-alpha-reductase is responsible for converting free testosterone into DHT.

The genes for 5alpha-reductase are known[4]. The enzymes are present predominantly in the scalp and prostate. Levels of 5alpha-reductase are one factor in determining levels of DHT in the scalp.

LLLT also improves scalp conditions such as psoriasis, seborrhoeic dermatitis, itchy/scaling scalp, which is due to anti-inflammatory effects. LLLT also normalizes sebum (oil) production in skin tissues (scalp), reducing hyperkeratotic build-up (scaling and crusting, blockage), and is an effect adjunct therapy for pre and post hair transplantation procedures.

Within 3 to 6 weeks, some users may experience increased hair shedding. This is a good indication and means the LLLT is effective. The shedding occurs because hair rejuvenation activates the “anagen” hair follicle’s growth phase. During the anagen phase, hair cells develop rapidly, producing the hair shaft within the follicle. The length of the anagen phase determines the maximum length of hair; this phase may range from 1,000 days to 3-6 years. The catagen cycle is the transitional or regressive phase. During this phase, the hair follicle shrinks and starts to die. The telogen phase is the final out cycle, the old follicle that is new anagen pushing, forcing the old hair from the telogen phase out. At any one time, about 90% of hair is in the anagen growth phase and about 10% is in the telogen out phase (shedding hair cycle). After resting, a hair follicle becomes active again, growing a new hair shaft as long as the follicle itself has not been damaged or obstructed. Within 60-90 days, significant reduction of hair loss, thickening and pigmented changes of existing hairs can be seen. Within 3-6 months, continued thickening of hairs, and fullness of scalp will become noticeable. After 16-18 months of regular treatments, maximum improvement is reached in the anagen growth phase.

Using the LLLT for hair rejuvenation is a lifetime commitment because our bodies constantly produce excessive levels of 5-alpha reductase (enzyme) and DHT unless we do something about it. Once the maximum benefit is reached, the user must continue treatments 3-5 times a week to maintain their results to slow and/or stop any further hair loss.

BENEFITS OF LASER HAIR THERAPY (650nm wavelenght)

- Proven technology in thousands of clinical studies
- Safe, conforms to FDA and IEC safety standards
- Effective
- Increases blood supply to the scalp by 54% after only one treatment
- Delivers coherent Laser energy directly
- Stimulates hair follicle and regrowth of hair
- Stops excessive DHT and hair shedding and loss
- Thicker hair cortex, fuller, shinier, softer and more manageable hair
- Repairs and improves hair shaft quality
- Relieves irritating scalp disorders
- Increased hair strength and elasticity
- Enhances the lasting effects of hair color and perms by closing the cuticle
- Better curl retention
- Pigment reinstatement
- Longer lasting color; less fading and oxidation
- Bonds and locks in conditioners for enhanced results
- Eliminate unpleasant odors associated with chemical services
- Non-invasive method, no surgery
- No thermal damage or burns
- Pain free
- No side effects
- No drugs or medications
- Doesn’t require supplementary expenses such as consumable medications and cosmetics mandate.
- No alteration or destruction of molecular structure or DNA

The procedure is beneficial for:

- Men or women who have or expect to have hereditary hair loss
- Those with secondary hair loss due to illness or medications
- Ladies who have or may have post-partum hair loss
- Patients using medications for hair loss
- Those who have had or expect to have surgical hair restoration
- Men or women who have hair loss due to medication (chemotherapy)