



# FDA Approves a laser to Promote Hair Growth\*

HLCC<sup>™</sup> has been very successfully been using Laser Hair Loss Treatment for the past 20 years.

Laser Hair Therapy  $HLCC^{TM}$  is the unmatched provider of Laser Solutions for Hair Loss

# What is Low Level Laser Therapy (LLLT)?

LLLT is a non-surgical, scientific approach to aiding in the treatment of hair loss, thinning hair, and scalp problems. LLLT is medically tested and FDA proven to be safe and effective as well as successful in re-growing hair. This breakthrough technology has recently been featured on dozens of national newscasts across the country.  $HLCC^{TM}$  is a leader in fighting hair loss for over 27 years and using laser treatment for the past 20 years. Unlike many treatments, LLLT works on all areas of the scalp and has been proven to both stop hair loss and regrow hair. It does this by stimulating the hair follicle and increasing blood flow to the scalp by over 50%.

#### Who should consider Laser Hair Loss Treatment?

Men with Male Pattern Baldness
Women with Women Pattern Baldness & Generalized Thinning
Stress Related Alopecia
Transplant Patients
Damaged/Broken Hair
Seborrheic Dermatitis
Alopecia Areata
Chemotherapy
Clients who get weaves, extensions, and braids

# What Doctors are saying about Laser Hair Loss Treatment

Our staff is seeing remarkable results with Clinical Laser Treatment." Dr. Hagstrom, Anew Aesthetic Medical Ctr. Transplant Surgeon

"Almost all clients will stop hair loss and re-grow hair, how much hair they re-grow varies" "98% of clients are very happy" Dr. Michael Fuhrman, HLCC

"Hair loss can be successfully treated with low-level laser therapy (LLLT)." Dr. Alvarez, LogiHealth

Our laser hair loss treatment program works for nearly every client. Laser Therapy is 100% Safe and Proven in over 3,500 scientific and medical papers over 30 years of research. Some clients who are in the initial stages of hair loss may see a faster response to this treatment program. However, almost all clients on this program stop hair loss and re-grow hair. Like any treatment, results vary by individual.





#### **HLCC Laser Method:**

#### More laser saturation with cosmetic lasers = better results

HLCC's cosmetic laser systems have more laser diodes (the element that transfers laser light energy to the client's scalp) than virtually all other laser programs in the marketplace today. Whether it's with a hand held, Hooded laser or impressive tri-panel units, our clients see the results from our multi-therapeutic laser programs.

# What Is Laser Hair Therapy?

Laser Hair Therapy (LHT) is a non-surgical, scientific approach in the cosmetic treatment of hair loss, thinning hair, and scalp problems. LHT has been tested for effectiveness and safety for over 30 years all around the world. Although we sell and offer Cosmetic lasers, several Medical devices have now cleared the US FDA.

The LHT non-surgical cosmetic treatments utilize a device containing 110-160 therapeutic soft low light level lasers. LHT delivers light energy directly from 110-160 laser diodes covering your head. LHT functions on the same scientific principle, as that of photo-bio-stimulation; laser light stimulates cell metabolism and helps damaged cells to repair themselves. This breakthrough technology has recently been featured on national newscasts across the country. Physicians are praising this new technology as an effective treatment of hair loss, when used in conjunction with proper scalp and hair hygiene products, such as Xtreme DHT inhibitor, the most potent natural DHT inhibitor and Xteme Boost, a 5% minoxidil with 5% saw palmetto.

# Laser Hair Therapy news

FDA - Approves a second Laser for Hair Regrowth\*!It's been featured for years on ABC, NBC, CBS & Fox News, and most recently on the Doctor's TV Show

Now, the latest study released at the ISHRS Convention in Amsterdam, Netherlands\* 2009 showed:

- 100% of the subjects saw an increase in hair growth
- 97% increased hair count equal to or greater than 20%
- 77% of the subjects increase of greater than or equal to 51%

\*Study presented by Dr. Grant Koher called Effect of Laser Biostimulation In The Treatment of Female Pattern Hair Loss

- Dr. Martin Unger conducted a study which showed a 94.4% increase in Hair!
- A European Study showed 100% retention of hairs and a 20% improvement in thickness and density of hair follicles using Laser Bio-Stimulation\*\*.
- A Laser received certification by the Canadian Government to claim and indicate that **it strengthens** hair, prevents hair loss and stimulates re-growth of hair in men and women.
- Long term international and Recent Clinical Trials with the Laser suggests many benefits from laser





hair treatments.

#### Laser Hair Treatment Clinical Results

Studies on Laser Hair Loss Therapy seen nationally:

# **Harvard University**

Massachusetts General Hospital (Harvard University) demonstrated development of healthy hair follicles through Laser Bio-Stimulation

#### **CLINICAL DATA**

For the MEP-90 efficacy determination, each subject received a total of 36 separate 20 minute treatments over a period of 18 weeks. Results were reviewed at the 10 week (20 treatment) and 18 week (36 treatments) levels. 100% of the linear trend plotting for all subjects of their initial, 10week, and 18 week hair counts demonstrated a historical rate of increased hair growth.

After the 36th treatment, 97% of the subject population demonstrated an increased hair count of = 20%. A total of 89% of all subjects demonstrated an increased hair count of = 30%, with 57% demonstrating an increased hair count of 50%. Hair Loss Laser therapy is 100% safe and proven in over 3,500 scientific and medical papers over 30 years of research.

#### 2010 FDA Cleared Device

FDA (Food & Drug Administration) cleared a Laser device for hair growth in the treatment of female pattern baldness. MEP-90 Hair Growth Stimulation System received clearance according to the recently published 510(k) report, which reviewed the performance data of an IRB approved Clinical trial. The trial results cleared the device for the treatment of androgenetic alopecia, commonly referred to as female pattern baldness. This is the first time a medical device has been cleared to promote hair growth in females. Previously, the FDA approved a hand held laser device for the treatment of male pattern baldness.

- \*see website for details of FDA cleared lasers as well as cosmetic hair loss lasers.
- \* These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.
- \*Dr. Roy Geronemus, Dr. Martin Unger, The Toronto Star Your health Salon offers balding men a cool zap. 6/6 (2008)
- \*\*Yu. A. Vladimirov, A N Osipov, G I Klebanov (2003) Photobiological Principles of Therapeutic Applications of Laser Radiation.





# How lasers came to be a standard in hair loss therapy

The Laser was first used in Eastern Europe about 25 year ago to speed up the healing process of diseased individuals. Since the late 1700s, scientific studies have shown that sunlight- or the lack of it - definitely affects our body's biochemistry.

Light also affects our hair, including how fast it grows. We have all experienced how our hair grows quicker during the summer, and this increased growth is due to improved blood supply to the hair follicles stimulated by the red light in sunlight.

A laser produces light measured at a wavelength of nanometers typical between 638.2 nM and 670 nM--a pure wave-length at the peak of red light in the visible light spectrum.

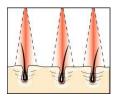
Laser Hair Therapy light provides the essential boost of pure red light at precisely the right frequency to revitalize and repair hair, yet it utilizes a soft laser that uses less energy than a 40-watt light bulb.

Although some lasers vary in the strength of each diode (normally 5 mw - 4.9 mw) generally the **more lasers** diodes a person is sitting under during each laser treatment will provide better results.

## Additional background: some a little older:

Laser/Low Level Light Hair Treatment

Many long-term clinical research programs at laser institutes internationally have shown that bio-stimulation of 'cold-beam', low-level laser gives numerous positive effects to the skin and hair.



The Laser Therapy bathes your hair root with a nourishing light and is designed to energize your hair.

Light is energy. Living cells "like" light and your hair is no different. The most common example of light converting into chemical energy is photosynthesis, where plants are fed via light converted into chemical energy.

Scientific studies on cell cultures have shown that laser penetrates into soft tissue and increases the action of adenosine triphosphate (ATP), a molecule that is a major carrier of energy from one reaction site to another in all living cells.

According to the eminent scientist Popp\*, living cells actually give out ultra-weak photons (light) with a coherence characteristic to laser.







He theorised that soft tissue and fluids in our bodies actually vibrate! And they do this within a frequency range similar to that of low-level laser. Popp postulated that "sick" cells are "light-starved" and when irradiated with low level laser in the correct frequency range they become "light-restored" and healthy.

\* Popp FA. On the coherence of ultraweak photon emission from living tissues. Kilmister CW (ed), Disequilibrium and Self-Organization, 207-230. 1986 Reidel

Another theory\* is that cells are largely dependant for healthy function on an exchange of energy and 'information' with surrounding cells. This is achieved via individual wave systems by which cells 'communicate' through inter-connective plasma which is affected by low level laser working at quantum level.

\*Wolbarsht ML. Ed: Clinical aspects of laser research. Plenum Press New York p116 1977

Recent Clinical Trials by a hair laser company suggests that more than **90% of users** achieve some positive benefits and results. "In general, about **45%** of users see noticeable indications of benefits from use of the laser within the first 6 weeks," according to Dr. Martin Unger, the company's Medical Director "Another **45% realize indications from 6 to 12 weeks** and 5% see subtle improvements after 12 weeks.

In March 2001 a hair laser like ours received wide public and press attention. This laser was named one of **TIME Magazine's "Inventions of the Year"**, and is receiving favorable press from numerous national magazines, newspapers and television news programs.

# **BACKGROUND**

Since the late 1700s, scientific studies have shown that sunlight- or the lack of it- definitely affects our body's biochemistry. Light also affects our hair, including how fast it grows. We have all experienced how our hair grows quicker during the summer, and this increased growth is due to improved blood supply to the hair follicles stimulated by the red light in sunlight.

#### **Boston Hair Laser**

The Helium-Neon (He-Ne) Laser was first used in some countries of Eastern Europe about eighteen years ago for very different diseases to speed up the healing process. A He-Ne laser produces light measured at a wavelength of 632.8 nanometers, a pure wave- length at the peak of red light in the visible light spectrum. Boston Hair Laser light therapy provides the essential boost of pure red light at precisely the right frequency to revitalize and repair hair, yet it utilizes a soft laser that uses less energy than a 40-watt light bulb.





### FREQUENTLY ASKED QUESTIONS ABOUT LASER

# **Q:** Does laser work for everyone?

A: Laser treatments are good for the hair. It works in varying degrees on everyone, from slowing, arresting or reversing hair loss to increasing the shine, body and elasticity of hair. Nothing is more detrimental to your personal appearance than thin-looking lifeless hair. Laser is recommended for either men or women who are in the early stages of hair loss or who demonstrate sufficient hair follicles capable of being rehabilitated by the laser hair therapy program. To maintain a healthy head of hair, especially if there is a history of baldness in your family, the sooner you start, the better.

Usually noticeable improvement is achieved in 4 to 6 months. However, if you have heavy hair fall-out, you may notice a reduced rate of fall-out after only a few treatments. Results vary per individual, and compliance is necessary to achieve the best results. Unlike many treatments, the Boston Laser's energy works on all areas of the scalp: front, top, back, and sides.

#### Q: How does laser work?

A: To appreciate how it works, you need to understand the basics of how hair grows and replaces itself in its natural cycle. Every hair on one's head usually grows for several years and then falls out. The root then rests for some weeks before starting to re-grow a new hair. This cycle continues throughout our lives. Unfortunately, as we

age, some people replace fewer hairs than are shed (and/or thinner, lighter hair) resulting in thinner hair and gradually baldness occurs. You don't go bald or thin out because your hair falls out – it's meant to do so. You go bald or thin out if it doesn't grow back! Laser used on a regular basis strengthens and regenerates the hair roots. This slows or arrests, and in some cases, reverses the degenerative cycle as previously described.

Once the hair roots are dead, nothing can be done to restore them, so the sooner treatment is started, the better your results are. Therapeutic pure red light stimulates blood supply to the hair bulb and scalp, increasing the number of red blood cells that deliver vital oxygen and nutrients. The result is a restorative and reparative chain reaction that clears debris from the hair shafts, swells the cortex and closes the cuticle leading to a healthier scalp and hair that looks and feels softer, thicker and shinier, and is more easily managed. Used in conjunction with Scalp Scripts products and oral treatment, laser light therapy delivers even more benefits, because the laser light closes the cuticle. When Boston Hair Laser is used with quality conditioners, damaged hair, split ends, and even dry, matted hair begin to show improvement. Even the negative effects of chemical perms are reversed with Laser treatments, because each strand of hair is nourished and repaired; making perms look more natural and waves and curls last longer. This is because the laser not only bonds the conditioner to the hair, leaving each strand repaired and shining, it also bonds moisture, invaluable for repairing damaged hair.

# **Mechanisms of Action**

Laser light uses the scientific principle of photobiotherapy. This process occurs when cells absorb light and repair themselves. Laser light penetrates deep into the tissues of the scalp, stimulating micro-circulation of blood supply, cell metabolism and protein synthesizes. Clinical studies suggest that this cellular and sub-cellular activity breaks down the collection of DHT helping to stop hair loss.

Many long-term international clinical research programs have shown that bio-stimulation of 'cold-beam' low-level laser gives numerous positive effects to the skin and hair. Research suggests that laser works by three





mechanisms.

EnergizationTransforming laser energy into cellular energy. Laser light increases the energy available to cells so they take in nutrients faster and get rid of waste products. Not surprisingly many, scientists and physicians have been using low level laser over the past 30 years to speed wound healing and produce new tiss	
☐ <u>Circulation</u> – Increasing blood and lymph circulation through vasodilatation. Microscopic studies have shown laser increases circulation and oxygenation of the blood to the scalp and hair bulb. Laser also removes calcification and blockages around the hair bulb; as well as increases cell replacement or regenerative activity. Laser helps hair to improve in fullness, shine, body and elasticity; therefore problems such as excessively oily odry scalp, dandruff and itchiness can also be reduced. In 1986 the International Laser Research Group Association included in their trial report on 'cold beam' laser:	
"If we start from a normal quantity of hair bulbs per square cm of the various subjects involved, we can state there was strengthening of hair bulbshair growth could be actually ascertained – also its being darker than before".	nat
□ <u>Vibration</u> – Bringing cells into harmonious oscillation patterns. The soft tissue and fluids in our bodies actually vibrate! They do this within a frequency range similar to that of cold-beam, red-light laser. When its vibrations become irregular or out-of-step, it can be brought back into "synchronization" by being irradiated w low level laser working at quantum level.	лith

#### Q: Is it safe?

A: Yes! Laser Light Hair Therapy is a non-surgical therapeutic laser. It is the most powerful laser that is safe for cosmetic purposes. It fully complies with the European standard EN60825, for laser safety and have been evaluated by UL, CSA, IMQ, TUV, NEMCO, International Laser Research Group Association, and the National Institute of Radiation. The FDA states that the Boston Laser complies with the USA FDA CDRH safety regulations Section 21 for cosmetic use in the United States as a Certified Class 11A cosmetic laser. The Boston Hair Laser has many years of research behind it, both experimental and clinical.

'Cold-beam' laser technology of the type in the Boston Laser has been used internationally in salons and hair clinics for many years, in a broad range of hair care and skin care applications. The power level of the Boston Laser is so low that it is virtually a mere vibration, harmless but effective.

One should not stare at the laser light source directly, to do so, one would have to intentionally stare upward. Safety glasses are provided, which fit over regular eyeglasses should you care to read while undergoing treatment. There are also safety features incorporated into the machine, which turns the laser off if movement is detected.





# Q: What are the benefits?

A: The	re are several benefits:
	Delivers light energy directly from different laser positions without loss of light properties to insure appropriate dosage.
	Increases blood supply to the scalp by 54% after only one treatment.
	Stops excessive hair loss.
	Stimulates hair follicle
	Repairs and improves hair shaft quality.
	Relieves irritating scalp conditions.
	Enhances the lasting effects of hair color and perms by closing the cuticle.
<u>Q: Ha</u>	ve the benefits been scientifically measured?
	A double blind placebo controlled study was conducted to evaluate the effect of laser light therapy by ring it with a placebo laser. Here are the results:
	All patients with the exception of one in the laser treated group showed a complete stop of hair loss.
	All patients, except three, showed a clear re-growth of hair with a reduction of at least one category in the Hamilton Classification.

Out of 18 patients, 14 showed an increase in hair thickness and all 18 showed improvement in the general hair shaft quality. The results showed no improvement in the placebo group or any adverse effect of the treatment.

# Q: Can I use it with transplants?

A: Yes. In fact, it is used post operatively to promote healing, reduce scarring, and ensure a higher rate of success for transplanted units. It has been proven very helpful when used before and after transplant procedures to help establish new grafts and minimize shedding of transplanted hair. Treatment should cease two weeks prior to surgery and resume two weeks after surgery.

Q: Can I use it with other treatments?

A: Yes. Laser therapy in conjunction with oral and topical therapy, may achieve faster and better results, than these treatments alone. If started early enough, it alone may be all the treatment that is needed to maintain your hair.

# Q: How long do Laser Treatments Last and what are the costs?

A: Call for more information today. Local: 518-220-1500 -Toll Free: 866-462-2669 "Add Laser to your





**current treatment today for maximum benefit"** Hair Industry expert \*see our site for details of the approval of the HairMax LaserComb which we sell the only FDA approved laser.