

## The Current of Life

By Diane Lytle • Dermaglow

Adenosine Triphosphate is a multifunctional nucleotide that is essentially a storage facility for energy derived from intake sources including carbohydrates, protein and fat to be used for cellular functions of life. Adenosine Triphosphate is often referred to as the "current of life" since it is literally the power source of every living organism. ATP is the only energy molecule that the body readily accepts and utilizes as energy. This includes all cellular activity, DNA replication, regeneration, healing, collagen and elastin synthesis, neuro transmission and muscle contractions. Being that the skin is our largest organ, massive amounts of ATP are required to regenerate and revive itself. Preventative aging and maintaining your health depends on maximizing ATP synthesis with the food and supplements that we eat, topical products we apply and advance skin care technology.

The body cannot survive without ATP, it manufactures it on an as "needed" basis through ATP synthesis, and it does not "store" ATP. Studies have shown a healthy human body uses what's equivalent to their own body weight in ATP every day. By the time a person reaches 60, this production rate will have deteriorated by nearly half.

Three distinct chemicals make up ATP. The first and most rapid synthesis of ATP is through **phosphocreatine**, also known as creatine phosphate. Phosphocreatine is found in ample supply on the skeletal muscle cells and is rapidly converted to ATP to energize muscles for very short bursts of energy, generally lasting no more than 10 seconds. An adrenaline rush is an example of phosphocreatine conversion to ATP, energizing muscles to allow this instant response. Phosphocreatine can be stored in large quantities, unlike ATP, which is why creatine supplements are popular for weight lifters and athletes who require quick, short bursts of energy.

**Glycolysis**, the second way the body synthesizes ATP, is an anaerobic form of ATP synthesis, no oxygen is required for this process. By utilizing stored energy in the glucose molecules of the muscles, ATP is synthesized. This method takes a bit longer to process, and it is thought to take over where the phosphocreatine method leaves off. Glycolysis is the dominant form of energy used for strenuous activities lasting more than 10 seconds and less than two minutes.

The most consistent form of ATP synthesis is generated in the mitochondria of the



cell, or the aerobic pathway, and it requires oxygen for the process to complete. The more one exercises, the more oxygen gets to the muscles, and the more ATP is synthesized. This is why the more you exercise, the more energy you have, the better you look and feel, and the better your immune system is.

**As skin care technology advances, there are a few treatments available to you that can help stimulate the synthesis of ATP and help you maintain your skin.**

**LED photopulsation** has been clinically proven to enhance ATP synthesis as well as other cellular activity in the stimulation of collagen and elastin, the softening of scar tissue and pigmentation issues, the treatment of acne, helping with the relief of neuropathy, arthritis and pain management, as well as encouraging muscle regeneration in people suffering from the effects of Bells Palsy, and other skin ailments such as **petechiae** (pin-point bleeding under the skin) and psoriasis. All these wonderful features of LED photopulsation are made possible through near ultraviolet wavelengths which stimulate the synthesis of ATP. Unlike lasers, LED does not heat up the dermal tissue and cause tissue damage. LED is a non-invasive procedure that when received on a regular basis, cumulative results are dramatic.

At Dermaglow®, we offer the Revitalight LED photopulsation system. The Revitalight system features the Lambertian light system, one of the most powerful LED systems on the market. For acne sufferers, the Blue LED wavelength has been clinically proven, and FDA cleared, for the treatment of acne vulgarus. Results with the Blue LED include an 81% reduction in lesion count and a marked reduction in pore size. Red LED is an over-all healing

wavelength that helps with the diminishing of pigmented lesions, fine lines and wrinkles, muscles regeneration and many rosacea sufferers have found that treatment with the Red LED provides relief from their symptoms. Studies suggest that low-level light in certain ranges, particularly the red and near-infrared range from LED lamps, have an anti-inflammatory effect.

MicroCurrent Technology is the only aesthetic treatment available that can physically firm and tone the skin through muscle re-education and has been clinically proven to encourage ATP synthesis by as much as 500%. This process of 're-educating' the facial muscles stimulates them with very small amounts of electricity which mirrors the body's own natural current and works in harmony with the body's electrical system. By reproducing the body's own biological current, we can re-establish muscle memory naturally. For muscles to contract, they need energy, and that energy comes from adenosine triphosphate. MicroCurrent impulses trigger a chemical reaction at a cellular level to increase the effectiveness of how our bodies use ATP. ATP is the only energy source that muscles have to power their activity, and these muscle fibers store only a limited supply of ATP. So, by increasing the supply of ATP to these muscle fibers, MicroCurrent plays a crucial role in cell metabolism and plumping up those slack muscles and enhancing fibroblast activity (collagen) and protein synthesis (elastin).

Dermaglow® utilizes the most advanced MicroCurrent system on the market. Product penetration is increased with each treatment through specific ionization, and skin feels and looks more hydrated and lifted. MicroCurrent treatments are perfect

for an upcoming event because it gives you a fresh, uplifted and healthy glow to your skin. Treatment plans vary for each individual's skin condition, and since results are cumulative, a series of treatments are recommended.

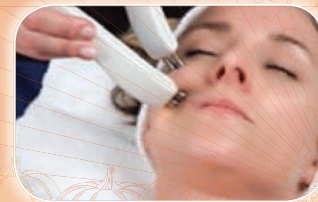
This upcoming holiday season, take advantage of the advance skin care treatments available at Dermaglow® for real results in a skin care and body treatments by highly trained and qualified technicians. We offer specialized treatments in a private one-on-one environment. Electrolysis, diamond microdermabrasion, microcurrent therapy, chemical resurfacing, body waxing, therapeutic massage therapy, thermogenic body wraps, organic spray tan, facials, organic mineral makeup, and lash extensions with TheLashChick™, the Valley's only advance lash artist for Novalash.

Visit our website for more information and check out our monthly specials!

### DermaGlow®

Enjoy the scents of the fall and Rejuvenate your skin with an

### Organic Pumpkin Wine Enzyme Facial



Rich in over 100 nutrients. Feed your skin for soft, hydrated glowing skin. For a limited time only.

Visit our website for PFD specials

Relax, Unwind & Glow with DermaGlow®

Facials • Waxing • Spray Tans  
NovaLash Extensions  
Massage Therapy • Body Wraps  
Organic Mineral Makeup & More!

GIFT CERTIFICATES AVAILABLE

315-0360

Located at 472 North Main St. Suite B  
Wasilla, Alaska 99654  
www.dermaglow-ak.com