

Anti-Aging & Pain Control...a NASA Research "Spin-Off"

Anti-Aging and Wellness is a priority for LED Technologies, LLC and our DPL™ Therapy Systems. Our goal is to use the power from Light Emitting Diodes for the slowing, prevention, treatment and reversal of age-related problems.

The DPL™ Therapy System uses a proprietary design based on NASA Study specifications.



The DPL™ Therapy:

Reduces the visible signs of aging -

- ✓ Wrinkles and fine lines
- ✓ Loss of firmness
- ✓ Skin thinning
- ✓ Lessen skin roughness
- ✓ Improves skin tone
- ✓ Reduces brown spots

Treats pain and sore muscles - accelerating healing -

- ✓ Activates production of Endorphins
- ✓ Blocks pain-transmitting chemicals
- ✓ Reduces swelling
- ✓ Heals black & blue tissue damage
- ✓ Heals wounds, sores and cuts

Anti-Aging Benefits of DPL™ Therapy

DPL™ Therapy:

- 1. Increases Vascularity:**(circulation) by increasing the formation of new capillaries, which are additional blood vessels that replace damaged ones. New capillaries speed up the healing process by carrying more oxygen as well as more nutrients needed for healing and they can also carry more waste products away.
- 2. Stimulates the Production of Collagen:** Collagen is the most common protein found in the body. Collagen is the essential protein used to repair damaged tissue and to replace old tissue. It is the substance that holds cells together and has a high degree of elasticity. By increasing collagen production less scar tissue is formed at the damaged site.
- 3. Increases Lymphatic System Activity:** Edema, which is the swelling or natural splinting process of the body, has two basic components. The first is a liquid part which can be evacuated by the blood system and the second is comprised of the proteins which have to be evacuated by the lymphatic system. Research has shown that the lymph vessel diameter and the flow of the lymph system can be doubled with the use of light therapy. The venous diameter and the arterial diameters can also be increased. This means that both parts of edema (liquid and protein) can be evacuated at a much faster rate to relieve swelling.
- 4. Stimulates the Release of Adenosine Triphosphate (ATP):**ATP is the major carrier of energy to all cells. Increases in ATP allows cells to accept nutrients faster and get rid of waste products faster by increasing the energy level in the cell. All food turns into ATP before it is utilized by the cells. ATP provides the chemical energy that drives the chemical reaction of the cell.
- 5. Increases RNA and DNA Synthesis:** This helps damaged cells to be replaced more promptly.
- 6. Reduces the Excitability of Nervous Tissue:** The photons of light energy enter the body as negative ions. This calls upon the body to send positive ions like calcium among other to go to the area being treated. These ions assist in firing the nerves thereby relieving pain.
- 7. Stimulates Fibroblastic Activity:** This aids in the repair process. Fibroblasts are present in connective tissue and are capable of forming collagen fibers.
- 8. Increases Phagocytosis:** Which is the process of scavenging for and ingesting dead or degenerated cells by phagocytes cells for the purpose of cleaning up. This is an important part of the infection fighting process. Destruction of the infection and clean up must occur before the healing process can take place.
- 9. Induces a Thermal Like Effect in the Tissue:** The light raises the temperature of the cells through a Photo-Chemical reaction.
- 10. Stimulates Tissue Granulation and Connective Tissue Projections:** Which are part of the healing process of wounds, ulcers or inflamed tissue.
- 11. Stimulates Acetylcholine Release:** Acetylcholine causes cardiac inhibition, vasodilatation, gastrointestinal peristalsis and other parasympathetic effects.
- 12. Stimulates Endorphins and Enkephalins:** Which are produced in the brain as well as chemicals from other areas of the body like adrenals which facilitate long term pain relief.