

# Sunburn and LED Therapy

Sunburns are caused by exposure to too much ultraviolet (UV) Light. When you're exposed to UV light, your skin accelerates its production of melanin—the dark pigment in the epidermis. This extra melanin creates the darker color of a "tan." The amount of melanin a person produces is determined genetically, and many people simply can't produce enough melanin to protect the skin well. Eventually, UV light causes the skin to burn bringing pain, redness and swelling.



## Photoaging:

Sun exposure and repeated sunburns accelerate the aging process of skin making you appear older than you are. Skin changes caused by the sun are called "photoaging."

## The results of Photoaging include:

- Weakening of connective tissues, which reduces the skin's strength and elasticity
- Thinner, more translucent-looking skin
- Deep wrinkles
- Dry, rough skin
- Fine red veins on your cheeks, nose and ears
- Large brown lesions (macules) on your face, back or hands, arms, chest and upper back (solar lentigines or liver spots)



## How LED—DPL™ Therapy Can Help!

### The DPL™ Therapy System:

- **Increases circulation** which speeds up the healing process by carrying more oxygen as well as more nutrients for healing.
- **Stimulates collagen**, which is the essential protein used to repair damaged tissue. By increasing collagen production less scar tissue is formed at the damaged site.
- **Activates production of endorphins** which blocks pain-transmitting chemicals.
- **Stimulates ATP** needed to repair or regenerate cell components.
- **Increases lymphatic system activity**, which helps reduce swelling.
- **Stimulates fibroblast activity**, which aids in the repair process. Fibroblasts are present in connective tissue and are capable of forming collagen fibers.
- **Increases phagocytes**, which is the process of scavenging for and ingesting dead or degenerated cells for the purpose of clean up. This is an important part of the infection fighting and healing process.
- **Stimulates tissue granulation**, which is part of the healing process of inflamed tissue.
- **Increases RNA and DNA synthesis**, helping damaged cells to be replaced promptly.