## What is LED Light Therapy?

So what is light emitting diode (LED) therapy? Light therapy, also known as phototherapy or low-level light therapy, is the application of specific wavelengths of light energy to tissue to obtain therapeutic benefits for a variety of conditions including skin, pain and hair restoration.

The absorbed energy is then used to improve cellular performance. Light therapy can be delivered through light emitting diode (LEDs) devices or cold LASERs, and has a variety of applications across many medical fields. This clinically validated technique is gaining greater and greater acceptance in main stream medicine by dermatologists and cosmetic surgeons as a non-invasive therapeutic modality for the treatment and healing of skin and wound conditions and by pain professionals for pain relief.

Phototherapy, or LED red light therapy, has been widely researched and is supported by thousands of peerreviewed and published clinical research papers from prestigious institutions around the world. Other terms by which light therapy is referred to are photobiostimulation, photobiomodulation, photomedicine, LED light therapy, low-level light therapy (LLLT), red light therapy, cold and soft LASER therapy. All terms are correct, have the same meaning and are used to describe the delivery of light energy to treat a variety of medical and cosmetic conditions.

LED light therapy treatments are non-invasive, painless, require no recovery time, and can be used safely on all skin types.

## **How LED Light Therapy Works**

In the same way that plants use chlorophyll to convert sunlight into energy, high intensity light emitting diodes (LEDs) utilizing specific, proven wavelengths of light can trigger a natural biostimulatory effect in human tissue. Research has shown that light emitting diode (LED) or phototherapy can increase circulation, accelerate tissue repair, kill acne bacteria, decrease inflammation, improve acne prone skin, skin tone, texture and clarity, decrease under eye wrinkles as well as ease muscle and joint pain, stiffness, spasm, and pain associated with arthritis. Research indicates that cells absorb particles of light (photons) and transform their energy into adenosine triphosphate (ATP), the form of energy that cells utilize. The resulting elevation of ATP is then used to power metabolic processes; synthesize DNA, RNA, proteins, enzymes, and other products needed to repair or regenerate cell components; foster mitosis or cell proliferation; and restore homeostasis. Simply put, the LED phototherapy source provides compromised cells with added energy so the cells performance is enhanced.

For example, fibroblast cells will increase collagen and elastin production in connective tissue to improve the appearance of fine lines and wrinkles in our skin and increase the rate of wound healing.

## **About the Celluma SERIES**

Cleared by the FDA for pain management, skin conditions and hair restoration, Celluma LED light therapy devices use specific wavelengths of light energy to improve cellular health by accelerating the repair and replenishment of compromised tissue cells for enhanced results. While similar devices on the market claim to do the same, they often require multiple machines and accessories to treat specific conditions or accommodate different parts of the body. From compact handhelds to large full-body light therapy devices, the Celluma SERIES offers convenient solutions for the treatment of skin concerns as well as muscle, joint and pain issues in a variety of versatile, affordable all-in-one systems.