**A process called Photo Rejuvenation can smooth away wrinkles, erase age spots, and relieve the symptoms of Rosacea.**

**The treatment is especially effective at improving the appearance of the face, neck, and chest, reducing signs of aging, wrinkles and age spots.**

**Photorejuvenation**

**Light therapy has been shown in over 40 years of independent research worldwide to deliver powerful therapeutic benefits to living tissues and organisms. Both visible red and invisible infrared light calibrated at the right wavelength have been shown to effect at least 24 different positive changes at a cellular level.**

**Visible red light, at the correct wavelength, penetrates human tissue to a depth of about 8-10 mm. Skin layers, because of their high blood and water content, absorb red light very readily.  It is very beneficial in treating problems close to the surface such as wounds, cuts, scars, trigger points, and acupuncture points.  Red Light is particularly effective in treating infections.**

**Infrared light, at the correct wavelength, penetrates to a depth of about 30-40 mm, which makes it more effective for bones, joints, deep muscles, etc.**

**Although both red and infrared wavelengths penetrate to different depths and affect tissues differently, their therapeutic effects are similar.**

**Wavelength dependent photobiochemical reactions occur throughout nature and are involved in such things as vision, photosynthesis, tanning and Vitamin D metabolism. In this view, red and infrared intense light is really a form of phototherapy. Red and infrared light emitting diodes (LED's) and lasers are important in that they are convenient sources of intense light at wavelengths that stimulate specific physiological functions (Lasers in Surgery and Medicine 9:1-5, Mayo Clinic, Rochester, Minnesota, 1989).**

**At this time, research has shown no side effects from this form of therapy other than an occasional increase in discomfort for a short period of time after treating chronic conditions. This occurs as the body reestablishes new equilibrium points following treatment. It is a phenomenon that may occur as part of the normal process of recovery.**

**LED's are no more than convenient devices for producing light at specific wavelengths, and in addition to the one already cited, several other studies (see references) establish that it is the light itself at specific wavelengths that is therapeutic in nature and not the machine that produced it. All biological systems have a unique absorption spectrum that determines what wavelengths of radiation will be absorbed to produce a given therapeutic effect. The visible red and invisible infrared portions of the spectrum have been shown to have highly absorbent and unique therapeutic effects in living tissues, particularly the skin, connective and muscle tissue.**

**LED vs. LASER**

**Light Emitting Diodes (LED's) are another form of light therapy that is a relatively recent development of the laser industry. LEDs are similar to lasers inasmuch as they can emit the same light but differ in the way that the light energy is delivered.**

**Lasers are focused beam single-wavelength light emitters that can be intense enough (a 'hot' laser) to burn/cut tissue or 'cold' enough to only have light therapy effects.**

**LEDs do not deliver enough power to damage the tissue, but they do deliver enough energy to stimulate a response from the body to heal itself. With a low peak power output but high duty cycle , the LEDs provide a much gentler delivery of the same healing wavelengths of light as does the laser but without the same risk of accidental eye damage that lasers do.**

**A significant difference between lasers and LEDs is the power output. The peak power output of LEDs and low level lasers are measured in thousandths of a watt, while that of  “hot” lasers is measured in watts. However, this difference when considered alone is misleading, since the most critical factor that determines the average amount of energy delivered is the duty cycle of the device.**

**LED devices have a 85% duty cycle. That is, the LED pulse is ON for .85 seconds and OFF for .15 seconds, versus the .2 millionths of a second burst from a laser at 1 hertz, which is ON .0000002 seconds and OFF for .9999998 seconds. This is a .00002% duty cycle. In short, the LED diodes can emit at least 33% more 'average' energy than a comparable powered laser diode (Our LED’s produce a much higher level than this) because of the substantially longer duty cycle, even though the peak output is much less.**

**Moreover, LED's allow the light beam to spread out instead of being a pinpoint light beam and they generate a broader band of wavelengths than does the single-wavelength laser. The wide-angle diffusion of the LED confers upon it a greater ease of application, since light emissions are thereby able to penetrate a broader surface area. Moreover, the multiplicity of wavelengths in the LED, contrary to the single-wavelength laser, may enable it to affect a broader range of tissue types and produce a wider range of photochemical reactions in the tissue. If LED light disperses over a greater surface area, this results in a faster treatment time for a given area than laser. The primary reason that we chose the LEDs over lasers is that LEDs are safer, more cost effective, provide a gentle but effective delivery of light and a greater energy output per unit of surface area in a given time duration. Our units produce visible near-infrared red light at 650nm (nanometers) and infrared light at 950 nm.**

**PHOTO REJUVENATION FAQ**

**What does Photo rejuvenation, Light Therapy, do?**

Light Therapy decreases that flaws we would all like to be without, such as:

-  Acne    -  Rosacea    -  Blemishes    -   Fine Lines via sun damage               -  Age Spots    -  Perinocular Wrinkles    -  Enlarged Pores    -  Skin Laxity    -  Coarse Skin        -  "Translucent " Skin

**How is the treatment administered?**

A trained skin care specialist will follow a step-by-step treatment technique with specific lights covering the skin areas to be treated. You will experience a feeling of relaxation, light warmth, skin stimulation and well being. A series of four to six treatments is scheduled to obtain maximum results. these treatments will be approximately one week apart with follow up maintenance treatments.

**Are there any side effects?**

Simply, No.  Photo rejuvenation treatment has no adverse effects and is completely safe. Photo rejuvenation is a FDA approved therapy.

You still must use caution when combining photo rejuvenation with any other products or treatments. If those products or treatments have side effects, please contact us before administering. Individuals taking steroid or cortisone injections, who are pregnant, or have epilepsy, should first consult a physician or not use Light Therapy.

**What is the length of time for the treatments?**

The treatment can take anywhere from 30 minutes to 1 hour. It requires make-up removal and may include an application of specialized products to acquiesce with the light therapy.

**Do I need maintenance treatments?**

Yes. Maintenance treatments are important in order to maintain your visible results. Usually, once or twice a month a maintenance treatment is recommended, unless otherwise determined by your situation.

**How soon can I expect to see results?**

The skin looks different after the first treatment: smoother and more hydrated with a natural radiant glow. Areas and conditions that are being treated begin to show longer lasting results after an average of three to five treatments, with monthly to bi-monthly maintenance treatments thereafter. Individual results may vary based on the severity of the condition and each individuals skin**.**

**How long can I expect my results to last?**

To enjoy lasting, cumulating results, maintenance treatments and an effective home skin care regiment is a very important determining factor.

**Is photo rejuvenation treatment for everyone?**

While almost everyone can benefit from the use of light therapy, the treatments will have the greatest impact on skin with sluggish metabolism and slow cellular activity, showing visible aging signs.

**Individuals taking steroid or cortisone injections, who are pregnant, or have epilepsy should contact a physician before using light therapy.**

**Is photo rejuvenation system a good compliment to other skin care treatments?**

Yes. As other skin care treatments beautify the skin surface, the light therapy treatment strengthens and rejuvenates tissue from within. Combining these treatments can deliver remarkable inner and outer results.

**Can I put my makeup back on immediately?**

Yes, there is no downtime with light therapy. If you are combining other treatments, this may vary.

**Can I go in the sun?  Will this treatment remove my tan?**

Yes and no. Yes, you can go in the sun immediately.   No, it will not affect your tan, but we do recommend that you use a sun blocker.

**Can I undergo acne treatment with retain-A or accutane while using light therapy?**

Yes, light therapy actually has a calming effect on the skin and will not react with these acne treatments.

**Is the light therapy process painful or abrasive?  How does it feel?**

A light therapy treatment is a gentle, painless, safe, non-invasive and non-abrasives treatment. Many find it relaxing and easy. It brings forth remarkable results.

**Can I undergo Microdermabrasion while using light therapy?**

Yes, Light therapy will actually calm the after effects of Microdermabrasion or chemical peels**.**

**Does the skin feel different?**

Because the results commerce from within the skin, the skin feels active, more alive, plump and tighter.