**HEALING WITH SINGLE FREQUENCY LIGHT**

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**EARLY EXPERIMENTS** In 1965, the Russians and Czechs were trying to standardize *colour therapy,* which is the use of colours to treat the body. When they used a single colour on a number of people, they got different reactions because colour affects emotions and produces different effects. The Russians wanted to have a standard treatment, so they theorized that if they isolated one frequency of blue, or red, they could duplicate colour therapy on a regulated basis. They started separating different frequencies with lasers, and they discovered a lot more than they expected to find. They discovered that a *single frequency light in a laser can stimulate DNA in damaged cell tissue.* They used a low power laser under 50-milliwatts because higher lasers can cut tissue.

**PULSED VS.CONTINUOUS LASER** They discovered that if they used a *pulsed laser light*, the tissue healed rapidly. On the other hand, if they gave a *continuous beam*, it sedated the cell and killed the pain. When a *single frequency pulsed light* hit the cell, it actually stimulated the cell to start producing more protein than it normally does, and as a result, the cell would heal. Even when they took the light away, the cell continued its healing. The *continuous beam* had a reverse effect. It actually caused the cell membrane to relax; it killed pain, reduced inflammation and made muscle tissue relax.

**INCREASED HEALING IN THE 660 nm WAVELENGTH** It didn't matter what the frequency was. It could be infrared, red, blue, or green, as long as it was single although, as you move toward the red end of the spectrum, the rate of cellular regeneration increased. For instance, a single frequency in the green range might affect the kidney 40 times better than a normal base-line study, whereas a red would be about 4,000 times faster. So over the years they migrated to infrared, red and eventually the 660 nanometer wavelength because it was the fastest way to regenerate tissue. So if you have an injury you would normally recover from in ten days, you can actually recover that tissue in two days by treating it with light.

**WAVELENGTH OF CELL TISSUE** About ten years later at the University of Chicago, researchers discovered that the average wavelength of cell tissue in the human body ranged between 600 nanometers and 720 nm; 660 is the mid-point. So in essence, the reason a 660 nm works better than any other single frequency is because it is closer to the resonant frequency of cell tissue. The other reason is that 660 nm absorbs better in hemoglobin.

**LASER LIGHT VS LIGHT EMITTING DIODES (LED)** When this therapy reached the U.S. and Canada, both lasers and light-emitting diodes at 660 nanometers were being used. The LED diffuses; the single frequency laser does not. With this diffusion, the cell can actually be in control of the treatment and shut off the molecules when it was done. But with the laser, the cells are no longer in control; the doctor or the practitioner applying the laser is in control. If he does it too long or with too much strength, you would not only heal the tissue, but you would start a deterioration again. So basically, the use of light-emitting diodes eliminated the draw back of lasers, and light could be applied into such sensitive areas as the eyes and around the face. LEDs allowed this whole area to blossom into a much larger usage by average people in their homes. Tiina Karu, Ph.D. of the Laser Technology Center in Russia, and affiliated with the University of California at Berkely, probably the top researcher in the world on the use of lasers and light emitting diodes published a study in *Health and Physics Digest* called "Photobiological Effects of Lasers" which discusses photobiological stimulation without laser light. The article explains that you can do laser treatment without using laser light, by using light emitting diodes which are much safer. Since the cells are basically in control of the process, there is no way to overuse light.

**THE MERIDIAN SYSTEM** Acupuncturists discovered that single frequency light could activate acupressure points. Pulse light could stimulate it; continuous light could sedate the acupuncture points. But they also discovered that light applied to a *meridian* end-point can actually be traced flowing through the meridian to the organ acupuncture points. The meridian system is a useful pathway for getting light deeper into the body, so if you are treating things like asthma in the lungs, there is an alternate method of getting light into the lungs.

**DEPTH OF LIGHT PENETRATION** As we developed more types of lights with different geometrical shapes, we were able to actually get light deeper into the body without going through the meridians. Initially, single frequency light penetrated approximately an inch and a half, but today, larger units can penetrate up to eight inches. It will go through the skull. We use it on *strokes, concussions and internal problems in the brain*. Excellent studies have been done using light for *pain relief, degenerative osteoarthritis, carpal tunnel tendonitis, skin ailments, acne, psoriasis, healing of the sinus cells, throat and ear problems, whiplash and lower back problems.*

**PENETRATING THROUGH THE BLOOD STREAM** You can even get light into the blood stream. One of the best ways is through your belly button, because the aorta artery is behind the belly button. So if you insert the light there for 20 minutes, every drop of blood in the body will pass in front of the light, increasing the activity of your white cells, red cells, B-cells and T-cells, so you can boost your whole immune system.

**ACUTE VS CHRONIC CONDITIONS** If you use lasers or light-emitting diodes, it will actually speed up healing by a factor of five. If you have chronic conditions like osteoarthritis or whiplash from 15 years ago, conditions that are not responding or are deteriorating, the use of laser and LED light has actually stimulated regeneration. I believe light is going to play the biggest part in chronic conditions for people who have already explored a lot of other modalities and have found no solution.

**BRAIN WAVE STUDIES** We were studying the diagnosis of illnesses like leukemia, etc through brainwave patterns. We were surprised to find that when we treat the person with light, or with heat, that when the body starts healing, it shifts into what is called a healing profile where beta waves disappear, and alpha, theta and delta appear like you wouldn't even find in a yogi.

**THERMAL THERAPY FOR IMMUNITY** A rectal heat probe allows the temperature to rise to between 98° and 113° in the rectum. It corrects prostate troubles and shrinks the prostate. It eliminates hemorrhoids. The most important use for rectal therapy is that it makes your body think you have a fever, even though the heat is only in the rectum. So the body will fight the fever by generating new white cells in the bone marrow. In this way, you can increase your white cell count overnight in lowered immune systems. Many thermal units are being used to boost the immune systems of people with serious illnesses such as cancer, AIDS and lowered immunity. We use heat to generate new white cells in depleted immune systems, and we use light on the blood stream to regenerate red cells, white cells, B and T-cells. So the combination of light and heat has been very effective with critical conditions.

*"I oppose sunglasses. Sunglasses are the main reason why the UV light destroys the eyes. This occurs because your pupils expand when you wear sunglasses, and the exposure can destroy your eyes even quicker". - Meier Schneider*

For more information please contact David Olszewski at Light Energy Co., Seattle, Washington at 1-800-LIGHTCO (1-800-544-4826).

You may purchase full spectrum lighting at Consumer Health Organization. If you wish bulbs to fit into a socket, make sure you specify that you want the fluorescent tubing type rather than the incandescent bulb. They come in 17, 20 and 23 watts (equivalent to 65, 80 and 95 watts in a regular bulb). Other products available are full spectrum light boxes, desk lamps, etc.