

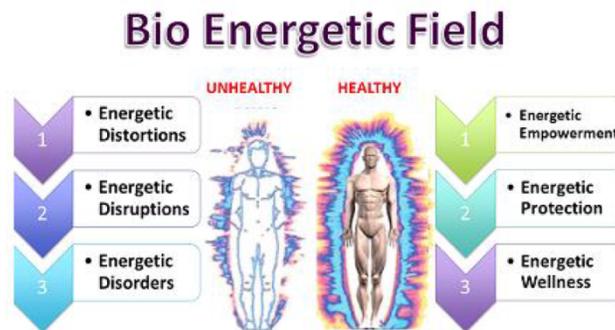
This paper will be a brief overview to certain types of light therapy, and discuss how and why healing with light can easily be added to anyone’s healthcare routine or healing practice. Since the subject of light therapy is so vast, this paper will concentrate primarily on low level light therapy (LLLT) from LEDs (Light Emitting Diodes) which produce minimal to no heat. Lasers can also produce low level light therapy. The difference in LEDs and lasers is the type of light they produce; with LED light waves being incoherent or dispersed, and laser light waves being coherent or focused.

Color and light have been utilized by healers for thousands of years. Color light therapy possibly has roots in Indian medicine (Ayurveda), ancient Egyptian culture and traditional Chinese healing. Alternative medicine practitioners who use chromotherapy often relate the seven colors of the color spectrum to specific body areas. Chromotherapy is the science of using colors to adjust body vibrations to frequencies that result in health and harmony. Each color possesses frequencies of a specific vibration, and each vibration is related to different physical symptoms.

Our bodies need the sun’s light to live. And that light can actually be broken down into a seven color spectrum. An imbalance of any of those colors can manifest itself in physical and mental symptoms. Color therapy works on various energy points to help balance your body via the full spectrum of visible light, each color addressing a distinct need.

Science increasingly agrees with direct human experience: we are more than the atoms and molecules of which we are composed, but beings that emit, communicate with, and are formed from light. Physical health is dependent not only on what goes on inside of the physical body, but is also interconnected with and dependent on other non-physical levels of energy, such as the energy surrounding your body, called the biophoton field.

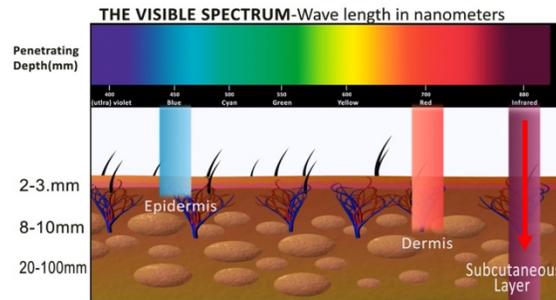
The existence of the biophoton field was scientifically proven by Dr. Fritz-Albert Popp in 1974. Dr. Popp also proved that biophotons originate from your DNA and that they are laser-like in nature. He developed the biophoton theory to explain their biological role and the ways in which they help control biochemical processes.



The introduction of light emitting diode (LED) devices and their use on the body has reduced many of the concerns formerly associated with lasers, such as expense, safety concerns and the need for trained personnel to operate them. In fact, many LED devices are designed for home use and are widely sold on the internet.

In the visible light spectrum LEDs can be made to produce any color wavelength, which is expressed in nanometers. The emission of the light (whether it's a red, green, blue, or other color) is due not to glass, paint, or pigment – it is solely the wavelength of the light itself that gives the beam its characteristic color. Since the wavelength is always a single frequency, the color is known as monochromatic.

The different wavelengths of color light determine depth of penetration into the body. Blue light being used for topical applications, with the red wavelengths being used for deeper tissue, bloodstream and muscle application. The infrared wavelengths are utilized for deeper penetration into the body such as organs and bones.



There are benefits to all of the light color wavelengths but clinicians and researchers are focusing on red and infrared light. The main medical applications of LLLT are reducing pain and inflammation, augmenting tissue repair and promoting regeneration of different tissues and nerves, and preventing tissue damage in situations where it is likely to occur. In clinical research Red and red infrared light therapy has been demonstrated to speed up wound healing by 200%. Faster healing means potentially less scarring.

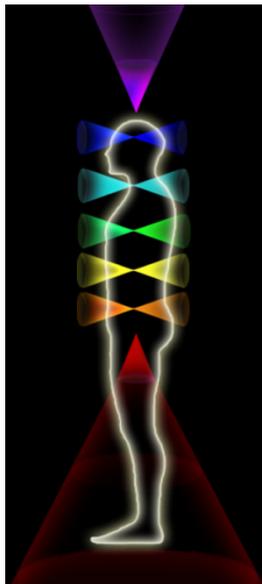
Some of the healing benefits of Red Light Therapy include:

1. Increases circulation and the formation of new capillaries. This aids in transporting to more oxygen and nutrients to the wound, supporting a faster healing process.
2. Increases phagocytosis, is the cleanup of dead or damaged cells, including dead bacteria. This enhances infection control.
3. Increases lymph system activity. This benefits the detoxification wounded areas assisting the lymph system, while enhancing prevention of lymph edema or swelling of the lymph system.
4. Stimulates the production of fibroblasts. Fibroblasts synthesize collagen, elastin, and proteoglycans in the final healing phases.
5. Stimulates the production of collagen. Collagen is the key protein involved in wound healing.
6. Stimulates tissue granulation. This simulates new connective tissue and capillaries on the surfaces of a wound during the healing process.
7. Enhances production of ATP (cellular energy). This promotes the entire system in faster regeneration.

Additional Uses for Red and Infrared Light Therapy:

- bed sores
- diabetic ulcers
- dermal ulcers
- oral lesions
- surgical wounds
- pressure ulcers
- cold sores
- nerve regeneration
- acne
- eczema
- psoriasis
- rosacea
- stretch marks

Benefits of Red and Infrared Light Therapy for Pain Relief



Red light therapy can reduce inflammation.
 Red light therapy can desensitize the nerves to pain.

Plantar fasciitis)
 syndrome

Spasms

- post-surgical pain
- TMJ

Regardless of the specific favored wavelength, researchers and practitioners who use red light find that it works on the principle of bio-modulation – turning a cell's function on or off through physiological means. Monochromatic red light stimulates blood circulation, increases lymphatic drainage, and promotes cell metabolism by stimulating photoreceptors in the mitochondria living within the cell. Mitochondria are tiny living organelles, with their own DNA and reproduction cycles, that live in symbiotic harmony with the cell and control many important cellular processes, including energy production. Except on the eyes, the light can be applied to every part of the body: skin, soft tissue, muscle, bone, brain, organs, lymphatic fluid, glands, and blood. Used over an artery, the light can improve the condition of immune cells – leukocytes, T-cells, and B-cells within the bloodstream – so they can more efficiently disable pathogens.

Red Light Therapy gives the cells in the body what they need to start self-healing processes. The human body has tools to fight infection and heal damaged tissue, but sometimes these tools don't work properly because we may have bad nutrition habits, or be unfit or be taking medication for chronic conditions that interfere with the proper functioning of the body. So the red light, in the simplest way of explaining it, adds the right frequency of energy to the cells of the body that then kick-start the body's own natural defenses against illness or injury. The Red Light Therapy is purely a catalyst that gets the body's own functions working correctly to do what it was designed to do. When cells absorb light energy, it initiates a series of events in the cell that is theorized to eventually result in normalizing damaged or injured tissue, a reduction in pain, inflammation, edema and an overall reduction in healing time by increasing intracellular metabolism.

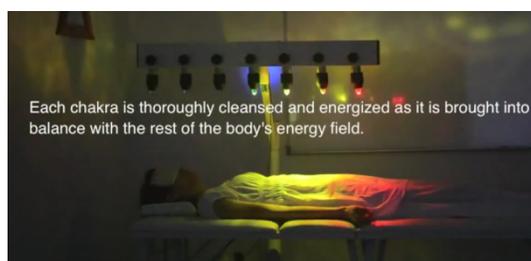
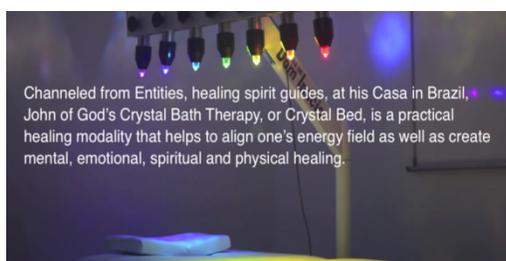
Not only is Light Therapy effective for the physical body but also the non-physical body. Chakra balancing with color light therapy is very effective. Our bodies have two invisible energy transport systems. One is the meridian system, a system meticulously charted in ancient China, which delivers the energies of light to organs and glands throughout our bodies. The other is the chakra system, charted in ancient India, which stores the energy of light in the region of the major nerve ganglions along the spine. The chakras are spirals of energy that function like pumps or valves to regulate the flow of light or color through our nervous system and throughout the body. The body seems to act like a prism as each of the seven chakras has a concentration of a particular color.

Chakras are the body's energy centers through which life energy or life force flows into and out of our aura.

They serve to create a harmony of energy throughout the body, mind, and spirit, and when one chakra is blocked, it can cause disease or distress to the entire physiological and psychological system. Various colors are assigned to the chakras, as are associations with the particular organ, gland, and body system they are connected to. The heart chakra, for example, governs the thymus gland and is in charge of the functioning of the heart organ, lungs, bronchia system, lymph glands, secondary circulatory system, immune system, and arms and hands. The heart chakra resonates to the color green. The seven main chakra centers are aligned along the spinal column. If there are disturbances on any level, this shows in the chakra's vitality level. Also, each of the seven main chakras is its own intelligence center. This means that each chakra is not only associated with our physical health, but also controls aspects connected to our emotional, mental, and belief system.

Chakra light healing beds consist of the 7 colors of the chakras and often shine the light thru a crystal to enhance the healing properties. The point is to raise the vibrations and frequencies of our energy centers to make them operate optimally bringing about homeostasis or perfect balance.

The lights radiate color and light energy through each of the charged crystals, corresponding to the optimal functioning of each chakra. As the light shines through each crystal, the corresponding chakra is balanced, cleansed and brought into alignment with all the other chakras. As various aspects of your body are brought into balance, you begin to reconnect with your higher awareness, allowing the body to rid itself of the stresses accumulated through living, resulting in experiences of deep relaxation, empowerment, balance and inner peace.



There are many other methods to utilize light for chakra healing. A single color light may be used with a chakra healing wand – flashlight type device or one color light at a time may be used with a lamp and led bulb.

With LED lights now being so readily available and affordable, it is an exciting opportunity for healers to add this modality to their healing practice.

References & Resources:

“Hands of Light, A Guide to Healing Through the Human Energy Field”, Barbara Brennan, 1987
<https://www.barbarabrennan.com/>

“Light Emerging, the Journey of Personal Healing”, Barbara Brennan, December 1993

“Light: Medicine of the Future” Jacob Liberman O.D. Ph.D.; October 1990.

<http://www.jacobliberman.org/>

Critical Analysis of Chromotherapy and Its Scientific Evolution, Samina T. Yousuf Azeemi and S. Mohsin Raza
eCAM 2005;2(4)481–488 doi:10.1093/ecam/neh137

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1297510/pdf/neh137.pdf><https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1297510/pdf/neh137.pdf>

<http://www.mylighttherapy.com/color-therapy.html>

<http://photonichuman.weebly.com/>

<http://www.chakrakey.com/chakra-frequencies-and-correlations/>

<https://colorpuncture.org/>

Attachment Handout:

Guide to using LED Light and Nogier Frequencies