

Research Review on Color Light Therapy

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There has been a huge amount of recent research into the healing effects of light on our bodies. What once seemed like the practice of fringe healers is now firmly moving into mainstream medicine. Various forms of light therapies have been around since ancient times. There are accounts of healing temples from ancient Egypt and Greece. According to [an article by Tama Day](#): "The Ancient Greeks were the first to document both the theory and practice of solar therapy. Heliopolis, the Greek city of the sun, was famous for its healing temples, in which sunlight was broken up into its spectral components (colors), and each component was used for a specific medical problem. Color, being a manifestation of light, held a therapeutic, as well as divine meaning for these historical cultures."¹

Modern light medicine got its biggest boost from the [pioneering work of an Indian physician named Dinshah Ghadiali](#). Ghadiali did a great deal of research into the use of color light for healing after moving to New York in 1911. He trained over 800 professionals between 1920 and 1924. He got his start with light medicine in India, after a young woman with severe diarrhea caused by colitis was rapidly cured when light from a kerosene lantern, passed through an indigo-colored glass bottle, was shone onto her. The woman was also helped by drinking milk that had been in an indigo-colored bottle left out in the sun. The milk apparently taking on the healing vibrations of that color of light. Over the next 20 years, his group amassed many thousands of successful case studies showing the remarkable power of light healing for a wide range of human diseases. As has often been the case with innovators, Ghadiali was ordered by the FDA to shut down his teaching and equipment sales in 1947. His son continues an educational institute in New Jersey.

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Light therapy has now come of age, redeeming Ghadiali's vision. Here are a few examples of recent research findings:

Cancers: [Small tumors in the lungs, esophagus and some body cavities can be destroyed without the negative effects of chemotherapy by using FDA-approved light therapy.](#) First, a chemical that sensitizes cancer cells to light is injected into the body. After waiting at least a day, a selected wavelength of light is applied to the tumor, which then dies and leaves healthy surrounding cells unharmed. There is also some evidence that this treatment stimulates the immune system to kill other cancer cells.²

Eyesight: Most of us understand that we are able to see because our eyes receive light patterns, which our brains interpret as images. The retina is the tissue in the back of our eyes that consists of light-sensitive rods and cones that absorb various colors of light. It is also true that we "see" light throughout our whole bodies. Modern research is now confirming how this works. [According to an article in the German medical journal *Raum & Zeit*, our bodies are loaded with light-sensitive flavin](#)

molecules called "cryptochromes," similar to those in plants.⁶ These are in our skin, blood, internal organs and elsewhere. The fact that these substances are throughout our bodies suggests that our bodies are full of light. This helps explain why light therapies that involve shining certain colors of light on the body, as Ghadiali and his colleagues demonstrated, have produced such positive results.

Bone-marrow transplants: "A device using specialized light emitting diodes (LEDs), based on NASA technology for plant growth in space, is continuing to show promise as a treatment to aid healing of bone marrow transplant patients ... Biologists have found that cells exposed to near-infrared light - that is, energy just outside the visible range - from LEDs grow 150 to 200 percent faster than those cells not stimulated by such light. The light arrays increase energy inside cells that speed up the healing process."³

Depression: "A study commissioned by the American Psychiatric Association and led by a psychiatrist at the University of North Carolina at Chapel Hill School of Medicine has found that light therapy effectively treats mood disorders, including seasonal affective disorder (SAD) and other depressive disorders. A report of the study, which appeared in the *American Journal of Psychiatry*, also finds that the effects of light therapy, also known as phototherapy, are comparable to those found in many clinical studies of antidepressant drug therapy for these disorders."⁴

Fungal infections: "A newly discovered mechanism by which an infectious fungus perceives light also plays an important role in its virulence," according to Howard Hughes Medical Institute investigators at Duke University Medical Center. The findings suggest that changes in light following fungal invasion of the human body may be an important and previously overlooked cue that sparks infection."⁵

Repairing genes: Many studies have documented that DNA, the double-helix molecule that holds all our genetic information and guides all growth and healing in the body, is highly responsive to light. Nina Schwalb described how light applied to DNA molecules makes them light up, or fluoresce, in distinctive ways. She concluded that laser light could be used to directly recognize and possibly repair many genetic diseases.⁹ The body conducts light just like telephone lines: Some Russian researchers have proposed that the protein fabric of the body acts as a fiber-optic system, as is used for telephone transmissions. Sergei Pankratov projected light on acupuncture points and was able to measure light streaming out of other points on the body. These points were along the same meridians as where the light was introduced. He concluded that the meridians are preferential pathways for the transmission of light in the body.⁶

Wound healing: Infrared light is most of what comes to us from the sun and is deeply heating. In a 2008 study, wounded rats healed significantly faster than controls without light therapy when polarized (uni-directional) infrared light was applied.⁷ Other studies show just what kinds of light speed healing. It seems that red-orange visible light and invisible infrared light at 820 nm work best.⁸

Color Hunger and the Psyche

The call of the body/mind complex for needed colors can be seen as "color hunger." I have observed many people expressing a strong desire for a specific one of the 12 colors offered in my treatments. As that color was applied to points on their body, they experienced beneficial reactions, such as deep relaxation, mental clarity, increased energy or relief of various somatic symptoms.

My sense is that we have hunger for a certain color not because the color isn't within us, but more because we are blocking it for some emotional reason. For example, orange is a color of creativity and joy. If a young child was criticized each time she drew imaginative pictures, she may associate her creativity with criticism and pain, causing her to block her access to the color to avoid pain. Applying therapeutic orange light to her in the right setting may help her accept and get in touch with that child-like joy of creation again.

My sense is that we hunger for a certain color not because it isn't within us, but more because we are blocking it for some emotional reason. When applied to appropriate acu-points, orange light can act as a natural antidepressant. Blue light (the complementary, or opposite, color to orange) has anti-inflammatory effects on arthritis and burns, and is effective for calming nervous tension and overly charged emotional states. Therefore, we can adjust our moods and energy with color.

The light spectrum moves from the most warming and activating colors - infrared and red - to the most cool and relaxing colors - violet and ultraviolet. Green is the balance point of the spectrum, and so is extensively used for balancing brain and body function, and detoxification.

Most of the research studies cited here tracks the effects of light applied to broad areas of the body or the whole body. In my opinion, the most exciting frontier of light therapy involves more specific applications through sets of acu-points for more targeted effects. I have conducted extensive trials of the beneficial effects of color light therapy in combination with low-level electrical stimulation (microcurrents) for treatment of the acupuncture systems.

When applied in this more specific way, results have often been more profound than generalized light stimulation. It appears that light is a form of pure information. Acupuncture points also provide information to the body in regulating a myriad of functions when properly stimulated. Appropriate information input through the acupuncture network triggers the release of a complex cascade of neuropeptides, subtle electrical shifts through cell membranes and neural adjustments. There are also other beneficial mind/body effects of light that are harder to quantify with modern scientific methods. This is a field that surely will be an important part of the future of medicine, being highly effective, low-cost and safe.

References

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MARCH 2009