

Benefits of Ultraviolet Light

-from PMS: Solving the Puzzle by Linaya Hahn

Light is important, but what kind? Research points to dramatic health benefits with full spectrum light. Full spectrum light has two parts: one visible one invisible. The visible spectrum consists of all the colors of natural sunlight. Imagine a rainbow or light broken up by a prism.

Ultraviolet light is present all the time outdoors during the day, even on cloudy days. You may have heard that ultraviolet light is bad for us and that we must protect ourselves from it. That is partly correct and partly incorrect. Ultraviolet (UV) light is commonly divided into three sections depending on its wavelength: near-UV (UV-A), mid UV (UV-B), and far UV (UV-C). UV-A tans us. UV-B stimulates the production of Vitamin D3 in our skin and is essential for the absorption of calcium into bones. The natural skin oils produced after ultraviolet exposure are capable of killing bacteria. Niels Finzen received the Nobel Prize in 1903 for successfully treating tuberculosis skin lesions with ultraviolet light. In fact, until penicillin was discovered in 1938, the preferred method of treating a wide variety of infectious diseases was exposure to the sun and its ultraviolet light, because sunlight was so effective in stimulating the patient's own immune system.

UV-C is another story. Although used in hospitals to kill bacteria and viruses, UV-C is widely considered to increase the risk of cancer. Fortunately, most of the UV-C that the sun gives off is blocked by the ozone layer of the earth's atmosphere. Still, it is clear that overexposure to the sun greatly increases your chance of developing skin cancer. Regular, moderate exposure, however, may actually decrease it. One rigorous study found that the incidence of malignant melanomas was considerably higher in office workers than in people who were regularly exposed to sunlight in their occupations or lifestyles. In fact, one of the lowest-risk groups was sunbathers. They were only half as likely to get malignant skin cancer as the office workers.

In his book *Light: Medicine of the Future*, Jacob Liberman, O.D., Ph.D., lists ten benefits of ultraviolet A and B. The following points are a synopsis of the research, which he pulled together. For complete information, please get his book.

1. UV light activates the synthesis of vitamin D, which is a prerequisite for the absorption of calcium and other minerals from the diet.
In a controlled study, the group receiving UV absorbed 40 percent more calcium from their diet than their counterparts who received no UV.
2. UV light lowers blood pressure.
One study reported that ultraviolet light dramatically lowered blood pressure after one treatment. The effect lasted five to six days.
3. UV light increases the efficiency of the heart.
In 18 of 20 people tested, cardiac output increased an average of 39 percent. In other words, their hearts became stronger and pumped more blood.
4. UV light improves electrocardiogram (EKG) readings and blood profiles of individuals with atherosclerosis (hardening of the arteries).
5. UV light reduces cholesterol.
In one experiment, 97 percent of the patients had almost a 13 percent decrease in serum cholesterol levels two hours after their first exposure. Within this group, 86 percent maintained this level 24 hours later.
6. UV light assists in weight loss.
This may be because the UV stimulates the thyroid gland, which increases metabolism and thus burns calories.
7. UV light is an effective treatment for psoriasis.
The National Psoriasis Foundation reports that 80 percent of people suffering from this condition improve when exposed to UV.
8. UV light is an effective treatment for many other diseases, including tuberculosis and asthma.

9. UV light increases the level of sex hormones. One medical laboratory found that estrogen has a sharp peak of absorption in a portion of the UV-B range (290 nanometers). This finding indicates that estrogen is most efficient when a woman is exposed to UV wavelengths.
10. UV light activates solitrol, an important hormone in the skin that works in conjunction with the pineal hormone melatonin.
Solitrol, possibly a form of vitamin D3, influences the immune system as well as many of the body's regulatory centers.