

HEALTHY LIVING REPORT

Focus on: Sunlight, sunscreen and tanning

MYTH: The sun is to be avoided.

FACT: The sun is our source of life.

Our lives, our health and well-being are truly dependent on the sun. The human body is nourished directly by eating foods, drinking fluids, or breathing air that has been vitalized by the sun's light energy.

– Jacob Liberman, OD, PhD

The sun is our source of life – without its energy bathing our planet we would have no plants – no grasses, fruits, vegetables and trees – and therefore no animal life and certainly no people.

Without the warming, nourishing, energizing, healing radiation from our nearest star our home planet would be as lifeless, and colorless, as the moon.

No wonder it has been worshipped in many cultures since time immemorial. It is our ultimate source of energy and life and it is absolutely indispensable for our health.

MYTH: Sunlight is dangerous to our health.

FACT: Sunlight is a source of health and healing.

Look at all the things sunlight does for you; it is more amazing than any drug imaginable. It can improve your mood and relieve depression; increase your endurance; increase your sex hormones; boost your immune system and improve resistance to infection; balance your metabolism and help you lose weight; strengthen your bones and muscles and protect you from osteoporosis; lower your blood pressure and blood sugar; lower your risk of heart disease, diabetes, arthritis, Parkinson's and multiple sclerosis; and even help prevent tooth decay and psoriasis and can be used as a disinfectant.

What other substance can do all that? Plus, it's available without a prescription – and it's free!

Heliotherapy (sunlight therapy)

All these great sun-giving properties are nothing new; the sun's healing powers have been recognized since time immemorial. Sunlight was used as therapy in ancient Egypt and ancient Greece. In more recent times, heliotherapy successfully treated infected wounds and ulcers often after other treatments failed. Rather than wrapping wounds in bandages which often served to "incubate" the bacteria, doctors realized that sunlight dried and disinfected wounds quickly and gently. During WWI heliotherapy was used to prevent and treat tetanus and gangrene; to cure tuberculosis, rickets, burns, varicose ulcers, osteomyelitis, abscesses and anemia and to heal fractures.

Sunlight therapy had specific protocols depending on the patient, and was introduced in a prescribed manner.



The role of Vitamin D

Your skin makes Vitamin D, essential for sustaining vibrant health, when exposed to sunlight. Vitamin D is needed for calcium absorption (to prevent osteoporosis), for improved muscular coordination and for protection from cancer, heart disease,

autoimmune diseases and radiation-induced tissue damage.

Vitamin D is also involved in the regulation of over 1,000 different genes – it's important for genetic health. It is much more than a vitamin; some researchers consider it a hormone absolutely necessary for a healthy life.

[www.vitamindcouncil.com/research.shtml]

[Ginanjar E, Sumariyono SS et al. Vitamin D and autoimmune disease. *Acta Med Indones.* 2007;39(3):133-141.]

[Lin J, Manson JE et al. Intakes of calcium and vitamin D and breast cancer risk in women. *Arch Intern Med.* 2007;167(10):1050-1059.]

[Robien K, Cutler GJ, Lazovich D. Vitamin D intake and breast cancer risk in postmenopausal women: the Iowa women's health study. *Cancer Causes & Control: CCC.* 2007;18(7):775-782.]

That is why news from a March 2009 study published in the *Archives of Internal Medicine* is so alarming: researchers found that three out of every four Americans are deficient in vitamin D. The deficiency has gotten worse in the prior ten years in part because so many people have been scared into avoiding sunlight and using sunscreen, hats and long sleeves to cover their body. In addition, those who are obese have greater vitamin D deficiency. According to Bruce Hollis, MD of the Medical University of South Carolina: "We know that obesity and increased BMI causes vitamin D to somehow disappear from the blood."

[www.npr.org/templates/story/story.php?storyId=102280117]

In addition to sunlight, you can get Vitamin D from your diet. Good sources of vitamin D include oily fish (sardines, herring), fish livers (cod liver oil), fish eggs, and the butterfat and organ meats from grass-fed animals.

MYTH: Sunlight causes cancer.

FACT: Sunlight reduces the risk of many cancers.

Should sunlight be avoided because of cancer worries? Actually, quite the opposite is true. One researcher states it bluntly: "Reducing exposure to solar radiation, far from preventing cancer, may have the opposite effect."

[Marks R, Melia J, Hawk JLM. Sunlight and health (letter). *British Medical Journal.* 1999;319:1066.]

These observations are nothing new. In 1941, Frank Apperly, MD found that sunlight produces immunity to cancer. His research revealed that cities in the northern latitudes had 150% more cancer than those in the sunniest southern latitudes.

[Apperly FL. The relation of solar radiation to cancer mortality in North America. *Cancer Res.* 1941;1:191-195.]

This finding was re-affirmed in 1993 by Gordon Ainsleigh, MD who reviewed 50 years of scientific research into the effects of sunlight on health. He concluded that the benefits of regular sun exposure appear to outweigh by a considerable degree the risks of squamous-basal skin cancer, accelerated aging and melanoma. He found trends in epidemiological studies suggesting that widespread adoption of regular moderate sunbathing would result in approximately a one-third lowering of breast and colon cancer death rates in the United States. Colon cancer and breast cancer are the second and third leading causes of cancer deaths in North America and Dr. Ainsleigh estimated that about 30,000 cancer deaths would be prevented each year if moderate sunbathing on a regular basis became the norm.

[Ainsleigh HG. Beneficial effects of sun exposure on cancer mortality. *Preventive Medicine.* 1993;22:132-140.]



A more recent study revealed that 13 malignancies have an inverse correlation to solar radiation. That means the more sun exposure the less breast, colon, ovary, lung and prostate cancer and non-Hodgkins lymphoma (as well as 7 other cancers).

[Grant WB. An estimate of premature cancer mortality in the U.S. due to inadequate doses of solar ultraviolet-B radiation. *Cancer.* 2002;94(6):1867-1875.]

[Smedby KE, Hjalgrim H, Melbye M. Ultraviolet radiation exposure and risk of malignant lymphomas. *JNCI.* 2005;97(3):199-209.]

A June 15, 2005 study published in the influential journal *Cancer Research* found that the risk of prostate

cancer was reduced by a full 50 percent in men who had high levels of sun exposure during their lifetimes, compared with men who had low lifetime levels.

Dr. Zane Kime, in his book *Sunlight Could Save Your Life*, describes how he encouraged one of his patients with breast cancer to sunbathe. She was a 41-year-old woman whose breast cancer had spread to her lungs and bones. She had already undergone a mastectomy and chemotherapy but to no avail. Dr. Kime did not treat the cancer directly but instead removed refined foods and polyunsaturated oils and fats from her diet. She was also encouraged to spend time sunbathing and the combination of diet and sunlight seems to have achieved remarkable results. Within a few months the patient was back at work and in the years that followed there were no apparent symptoms of her metastasized cancer.

[Kime ZR. *Sunlight*. Penryn, CA: World Health Publications, 1980.]

How does sunlight protect against cancer? Vitamin D production is considered the mechanism. "The association between latitude and breast cancer suggests that higher UV-B (ultraviolet B) exposure is protective ... spurs production of vitamin D.... Other research suggests vitamin D may help ward off cancer."

[Grant WB. An ecologic study of dietary and solar UV-B links to breast cancer mortality rates. *Cancer*. 2002;94:272-281.]

[Boscoe FP, Schymura MJ. Solar ultraviolet-B exposure and cancer incidence and mortality in the United States, 1993-2002. *Cancer*. 2006;6:264.]

MYTH: Sun exposure causes skin cancer.

FACT: Sunlight is only one factor for developing skin cancer.

The fairer the skin, the more easily it is sunburned and damaged. By far the biggest risk for skin cancer is simply having fair skin – with or without the use of sunscreen. There's no substantial evidence that using sunscreen protects you from skin cancer. In addition, ninety percent of skin cancers are basal and squamous cell carcinomas, which are rarely life threatening and are usually easily removed by simple outpatient surgery. These are the ones caused by excess solar radiation. But why doesn't everyone with fair skin who gets a lot of sun get skin cancer? Other factors, especially poor nutrition and toxicity, have been implicated as co-factors in cancer development.

What about melanoma?

Melanoma is a serious form of skin cancer that is malignant and can spread to internal organs, often leading to death. Melanoma usually appears in areas not exposed to the sun.

Sam Shuster, MD, specialist in dermatology, says that melanoma occurrence decreases with greater sun exposure and can increase with the use of sunscreens.

[Shuster S. Is sun exposure a major cause of melanoma? No. *British Medical Journal*. 2008;337:a764.]

I think you might dispense with half your doctors if you would only consult Dr. Sun more.
– Henry Ward Beecher

His findings are verified by researchers who concluded that increased sun exposure actually increases the survival rate from melanoma.

[Berwick M, Armstrong BK, Ben-Porat L et al. Sun exposure and mortality from melanoma. *J Natl Cancer Inst*. 2005;97:195-199.]

Research indicates that lack of sunlight kills thousands more people than ever die of skin cancer.

MYTH: Sunscreen use protects your health.

FACT: Sunscreen may increase your risk of cancer.

SPF sunscreens appear to increase your chances of getting melanoma and, in fact, to increase your risk of developing vitamin D deficiency diseases such as brittle bones (osteoporosis), autoimmune diseases, rheumatoid arthritis and other conditions.

How much sunscreen is dangerous? An SPF 8 sunscreen reduces UVB penetration by 98% and essentially abolishes vitamin D production.

[Holick MF. Vitamin D: a millennium perspective. *Journal of Cellular Biochemistry*. 2003;88:296-307.]

Sunscreen use increases nevi formation on the skin, which is a strong predictor of melanoma. A review of studies led researchers to state: "Epidemiological studies suggest that sunscreen use is associated with an increased risk of melanoma skin cancer."

[Autler P, Dore, JF, Cattaruzza MS et al. Sunscreen use, wearing clothes, and number of nevi in 6- to 7-year-old European children. *JNCI*. 1998;90(24):1873.]

Most alarming is a May 24, 2010 report from researchers at the Environmental Working Group that sunscreen may cause more cancer than it prevents. Sunscreens do not prevent ultraviolet light from damaging skin cells and causing tumors and lesions. About 60% of sunscreens tested contain the hormone-disrupting chemical oxybenzone, which penetrates the skin and enters the bloodstream. In addition most sunscreens contain vitamin A and its derivatives, retinol and retinyl palmitate, that may speed up the very cancer that sunscreen is supposed to prevent.

[<http://www.ewg.org/2010sunscreens/full-report/>]

MYTH: Tanning and tanning booths are dangerous.

FACT: Tanning is nature's protection.

Practice "safe sun." Use common sense. Except for albinos (who congenitally lack melanin) our bodies will respond to extra sun by developing a tan to a greater or lesser degree. Take it slow so your skin won't burn. Dr. Allan Halpern, Chief of Dermatology at Memorial Sloan-Kettering Cancer Center in New York, says that people just shouldn't overdo it: "I am advocating common sense," he said.

We can't emphasize enough that you need sunshine. Harvard University professor of medicine and nutrition Dr. Edward Giovannucci, lecturing at an American Association for Cancer Research meeting, said vitamin D might help prevent 30 deaths for each one caused by skin cancer. "I would challenge anyone to find an area or nutrient or any factor that has such

consistent anti-cancer benefits as vitamin D," said Dr. Giovannucci.

[www.direct-ms.org/pdf/VitDPopularArticles/SunshineMayPreventCancer.pdf]

MYTH: It's better for your health to stay out of the sun.

FACT: Sunlight is essential for health.

All life, human included, developed, evolved and thrives under natural sun exposure. Sunlight is an essential nutrient; you need it for a healthy life. Don't avoid the sun, embrace it!

Enjoy the sun – just use common sense and don't burn.

Suggested Reading & Resources

The Healing Sun: Sunlight and Health in the 21st Century by Richard Hobday. Forres, Scotland: Findhorn Press, 2000.

Light: Medicine of the Future by Jacob Liberman. Santa Fe, NM: Bear and Company, 1991.

Sunlight by Zane R. Kime. Penryn, CA: World Health Publications, 1980.

Nutrition and Physical Degeneration (Sixth Edition) by Weston A. Price. Lemon Grove, CA: Price-Pottenger Nutrition Foundation, 2004.

An excellent discussion of the dietary sources and safety of Vitamin D by Chris Masterjohn, called ***From Seafood to Sunshine – A New Understanding of Vitamin D Safety***, can be found on The Weston A. Price Foundation website at: <http://www.westonaprice.org/basicnutrition/vitamin-d-safety.html#sunlight>

Provided as a public service by: