Summer is here, and being so, we all spend a greater amount of time outdoors. Today, parents are almost considered abusive if they do not protect their children from the sun, a presumed cause of skin cancer. This article will bring new light to your attitudes about sun exposure, causes of skin cancers and the traditional sunscreens we rely on.
Natural sunlight is necessary for good health. Daily moderate exposure enables the body to produce Vitamin D and synthesize melanin (our body’s natural sunscreen). Overexposure to the sun causes photo damage to the skin, actinic keratoses, a precursor to squamous cell carcinoma. It is also immunosuppressive and accelerates skin aging. Underexposure is dangerous as well, as one becomes “light deficient.” Light deficiency induces Vitamin D deficiency, thus accelerating melanoma growth risks.

Dr. Gordon Ainsleigh is a proponent of regular moderate sun exposure, which he believes can prevent as many as 30,000 cancer deaths in the United States yearly. A study published in CANCER (March 2002: 94:1867-75) bolsters his thesis. Rates of thirteen types of cancer were found to be higher in New England where people may not be synthesizing Vitamin D at all due to lack of sunlight in the wintertime. Deaths from cancers of the rectum, stomach, uterus, bladder and others were nearly double of that of people in the southwest. Dietary patterns were compared and little difference was noted. Most sunscreens are designed to block UVB rays, which are from where Vitamin D are synthesized. In light of this report and others, along with epidemiological studies linking a lack of sun exposure to sub-optimal Vitamin D levels, it may be time to reevaluate our notions of sun exposure and its effects on our health.

Putting Light on the Subject of Skin Cancer

Although sun exposure is usually blamed for skin cancer, these studies reveal provocative findings.

1. Melanoma was occurring in areas where sunscreen is used the most and melanoma rates are highest among those that avoid the sun and work in indoor urban environments.

2. A study in BMJ examined the relationship between indoor fluorescent lights and the ever rising rate of melanoma. Taking into account such factors as hair color, skin type and the history of sun exposure, it was found that working under fluorescent lights had doubled the risk of melanoma in the subjects of the test group.

3. Evidence that the sun was the causative factor in the development of melanoma was weak and inconclusive. Tanned skin from regular exposure to the sun and people who received more sunlight were less vulnerable to the deleterious effects of fluorescent lights.

4. Russian researchers found women working under fluorescent lights to be at a greater risk of melanoma. In 1990, a U.S. Navy study found the highest rates of melanoma in those that worked indoors.
5. In 2001, the National Academy of Sciences published a comprehensive review showing that the omega 6:3 ratio was the key to preventing skin cancer development. Omega-3 and omega-6 fats are both essential for human health, however the typical American consumes far too many omega-6 fats in their diet while consuming very low levels of omega-3. While the ideal ratio of omega-6 to omega-3 fats is 1:1, our ratio of omega-6 to omega-3 averages from 20:1 to 50:1! The primary sources of omega-6 are corn, soy, safflower and sunflower oil; these oils are overabundant in the typical diet, which explains our excess omega-6 levels. Avoid or limit these oils.

Uncovering the Facts about Sunscreen

1. Studies fail to prove sunscreens prevent basal cell cancers and melanoma, yet most public health officials still insist that sunscreen use or or abstinence from the sun is our best protection. 
2. Oddly enough, since the introduction of chemical sunscreen, skin cancer rates began to climb and not fall. For example, melanoma rates doubled from 6 to 13 per 100,000 people since 1973. Today, skin cancer diagnoses surpass all other cancer, with over 1.3 million new cases each year, with new melanoma diagnoses to be close to 48,000 in 2002, according to the American Cancer Society. 
3. Research shows sunscreen does not protect against melanoma, the most dangerous form of skin cancer. Lotions decrease the risk of sunburn, they do not block UVA rays, which cause melanoma. Even sunscreens with the highest protection factor of 35, applied in the correct amounts, were not effective at filtering out the harmful rays. They say that people should limit their sunbathing time and use clothing to block UVA rays when sun is at its strongest.

Absorbing the Truth about Sunscreen

Recently, a study in the April 2004 Journal of Chromatography found that there is significant penetration of all sunscreen agents they studied into the skin, and oxybenzone and metabolites across the skin. Concentrations of Benzphenone 3 and its metabolite, 2’4 dihydroxybenzophenone, have been found in human urine only four hours after application. They have also been found to be absorbed from the gastrointestinal tract and bioaccumulation of them has been detected in human milk samples.

1. Benzophenone and oxybenzone (benzophe 3) are among the most powerful free
radical generators known. (In 1997 sunscreen chemicals such as benzophenone and ethylhexyl- p-methoxycinnimate, and PABA esters such as padimate-o and octyl dimethyl PABA were banned by the European community.)

2. Octy Methoxycinnamate (OMC), may be dangerous if it gets into the bloodstream. As far back as the 1970s, Professor Howard Maibach discovered that as much as 35% of sunscreen enters the bloodstream and the longer it is on the skin, the more absorbed.

3. Triethanolamine (TEA) when applied topically to female mice, shows an increase in liver tumors, whereas male mice had a smaller increase in liver tumors but also developed kidney tumors. TEA combined with water or nitrates (often used as a preservative but not required by law to be listed) can produce nitrosamines, which are carcinogenic.

4. Parsol 1789 is a chemical which blocks UVA but is also a free radical generator and skin penetrant.

5. 2-phenylbenzimidazole-5-sulfonic acid (PBSA), an ingredient found in some sunscreens, and has been shown to damage DNA when exposed to light.

6. Chemicals known as estrogen surrogates, or gender benders, are suspected of causing reproductive disorders in animals and humans. Such disorders include deformed or stunted growth of genitalia and may be, in part, responsible for the dramatic rise in cancers of the prostate, breast, testicles and uterus. 7- Chemicals in sunscreens were found in fish in Germany turning some of the fish into hermaphrodites.

7. Chemicals in sunscreens were found in fish in Germany turning some of the fish into hermaphrodites.

8. Benzphenone-3, homosalate octyl-methoxycinnimate, 4-methylbenzlidene (4mbc) camphor and octylidimethyl-PABA (o-d-PABA) are all estrogen mimickers, and all were shown to increase cell growth in breast cancer cells! Three of these cells were found to cause developmental problems in animals, and 4mbc, when mixed with olive oil and spread on the skin of rats at concentrations permitted in sunscreen, doubled the uterine growth rate before puberty, a very shocking and disturbing discovery. The presence and exposure to estrogen mimickers are and should be of monumental concern, for when these estrogenics make contact with hormone receptors, they are interpreted as the real thing (estrogen) and the results are the feminization of tissue. This may lead to developmental problems that can lead to endometriosis, uterine and breast cancers, disruption of the menstrual cycle and other problems for women. In men, it may lead to testicular cancer, breast enlargement, lower sperm counts, loss of sex drive and more.

What’s a Mother to Do?

1. Make sure your children have daily exposure to the healing rays of the sun.
2. Gradually expose your children to the sun’s rays—especially in the summer months.
3. Avoid sun exposure during the strongest hours of the day: between 11:00 a.m. and 3:00 p.m.
4. Be aware that snow and water intensify sun radiation, so adjust exposure accordingly.
5. Use clothing, hats, sunglasses and umbrellas to decrease the amount of direct exposure.

6. Carefully select sunscreen products that have natural, mineral based ingredients, are free from synthetic sun ingredients and are safe, non-toxic, preservative free and bio-degradable. Where do you find mineral-based sunscreens? Check out your local health food store. Other sources include Lavera Natural Cosmetics, (www.lavera-usa.com), and Natural Health Newsletter recommends www.colorsience.com.

7. Titanium dioxide and zinc oxide are two ingredients which act as physical barriers that reflect UV rays and may be less problematic in terms of absorption.

8. Increase your child’s omega-3 levels and decrease the typically overabundant intake of omega-6 fats. Today, many advocate the use of “alternative lights,” such as full spectrum lighting. Replace traditional fluorescent lighting with full spectrum lights in places where your children spend a lot of time. Suggest to your schools and day care centers that they follow suit.

Resources:

Much of this article was excerpted from an excellent book called *The Skin Cancer Breakthrough Program* by Kurt Greenberg with permission. To order this book and a special cream he developed to reverse and prevent damage from the sun visit Sedna Health Products: www.sednaproducts.com.

Also visit Kurt Greenberg’s website: www.kurtgreenberg.com to read exceptional articles and hear interesting interviews on other health issues.

Other sources are by Lavera Natural Cosmetics: www.lavera-usa.com
Where else do you find mineral-based sunscreens? Check out your local health food store.