

The Wellness Family

Dr. Erin Keeps You Informed

Sunblocks and Sunscreens Helpful or Harmful?

In 1938, chemist Franz Greiter developed the first sunscreen, and in 1944 airman Benjamin Greene, who later became a pharmacist, developed his own version to protect soldiers fighting in the South Pacific from sunburn. Since then it's been considered a necessity for anyone going out in the sun for any length of time. But is this really a necessity or is it doing more harm than good?

The History of Sunscreen

Franz Greiter developed the first sunscreen, Gletscher Crème, after allegedly getting sunburned, and then created the company Piz Buin, which is still a well-known marketer of sunscreen products. However, Benjamin Greene's product, Red Vet Pet was more widely used. Short for Red Veterinary Petrolatum, Red Vet Pet was similar to petroleum jelly in consistency, red in color and hardly effective.

The concept of the "Sun Protection Factor" or "SPF" originally credited to Franz Greiter, supposedly helped determine which sunblock or sunscreen would be best for use based on the measurement of effectiveness when applied at an even rate of 2 milligrams per square centimeter of skin. Controversy still exists over the accuracy of this rating system and whether or not the rate of application truly represents the actual use.

With the more widespread use of sunscreens came the development of water proof or sweat proof products and eventually the claim that sunblocks and sunscreens are the ultimate protection against most forms of skin cancer.

Chemical Dangers

Created to block out the UV-B ray or ultraviolet radiation that causes sunburn, sunscreens were originally designed solely to protect the skin from being burned utilizing different chemicals.

These chemicals include Oxybenzone, Methyl anthranilate, Titanium dioxide and zinc oxide among others. Chemicals approved for use within the European Union and other parts of the world that have not been tested include but are not limited to: 4-Methylbenzylidene camphor, Tinosorb M and S, Uvasorb HEB and Isopentenyl-4-methoxycinnamate.

Adverse health effects have been associated with some synthetic compounds in sunscreen, and in 2007 the Center for Disease Control (CDC) reported a concern regarding oxybenzone (benzophenone-3). There were two studies, the first of which "detected the chemicals in greater than 95% of the 2000 Americans tested," and the second study revealed that mothers with high levels of oxybenzone were more likely to give birth to underweight baby girls.

The Problem

The original idea to block the UV-B rays that cause sunburn may have been a sound one but, as with most chemical options, it failed to take into account any possible consequences.



"Rather than slathering chemicals on your children, consider limiting sun exposure..."

While sunscreens and sunblocks are protecting the skin from being burned by UV-B rays, they are not blocking UV-A rays which penetrate the skin more deeply and actually cause melanoma. Research has shown that even SPF 35 sunscreens, applied correctly and in the right amount, do not effectively block out harmful UV-A rays.

In other words, sunscreens and sunblocks can actually increase your risk of cancer. First, as was just stated, by blocking out some of the sun's harmful rays but not all of them. Second, the sensation of being burned is stunted, typically resulting in a longer amount of sun exposure, which means more exposure to the harmful UV-A rays that cause melanoma. Finally, sunscreens and sunblocks do not allow the body to absorb the sun's rays and produce Vitamin D.

Vitamin D and Sunshine

The most powerful and natural vitamin D is produced by the body when in direct sunlight, preferably the

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noonday sun for about 10-20 minutes a day or until the skin begins to turn a light pink. Despite the hype about the sun's rays being dangerous and cancer-causing, the fact is that we cannot be healthy without regulated and regular doses of natural direct sunlight.

While vitamin D supplements do exist these tend to be a much weaker variant called D2. The most powerful vitamin D is D3 and it is this variant that is produced by the body, when in the sun, and has been found to be a natural cancer preventative.

In 2007, a study published in the *American Journal of Clinical Nutrition* found that vitamin D cut the risk of several types of cancer by as much as 60% but it's important to understand they were using a natural supplement of vitamin D3, which is available in stand-alone dietary supplements.

Additionally, a study published in the UK Times in 2009 reported that "mothers given ten times the usual dose of vitamin D during pregnancy had their risk of premature birth reduced by half and had fewer small babies," as well as a 25% reduction in infections.

Of course, as with all vitamin supplements, it is best to purchase them from a reputable supplier and not over the counter at a department store or corner drug store. Not all vitamin D supplements are created equal and, as previously stated, your best and most natural source will be 10-20 minutes in the sun.

Sunlight Dangers

Understandably, it will be difficult to put aside 50 years of indoctrination. Having been told repeatedly that the sun's rays cause cancer, sunburns will result in deadly melanoma and it's child abuse to let your children play in the sun without sunscreen, the concept of throwing away the sunscreen can be a bit

overwhelming. Yet, the facts are clear, the creators of sunblocks and sunscreens failed to consider the consequences of their actions.

In 2002, 50% of all cancers in the United States were skin cancers. That works out to about 1.1 million cases of diagnosed skin cancer in one year. Considering the prevalence of sunscreen propaganda for the last 50 years it's safe to assume that most of those 1.1 million people were wearing sunblock or sunscreen so it's equally safe to assume that sunscreen is not the ultimate protection against skin cancer.

Internationally recognized research scientist and vitamin D expert, Dr. William Grant, has stated that about 2,000-4,000 IU a day of vitamin D can help reduce cancer risk by up to 50%. He has also determined that up to 30% of all yearly cancer deaths could be prevented with higher levels of vitamin D. That equates to 2 million deaths worldwide and 200,000 in the U.S. alone.

Exposure Wisdom

Rather than slathering a toxic concoction of chemicals on your children, consider limiting sun exposure to spans of 10-20 minutes at a time. When limits cannot be set, be sure to wear loose-fitting, light-colored clothing as lighter-colored fabrics will reflect the sun's rays instead of absorbing them. Also, hats with a wide brim will protect both the face and the back of the neck.

When swimming, always have children wear a thin light-colored t-shirt over their swimsuits. This will protect their shoulders and chest from over-exposure to the sun, as these are the areas most likely to burn when in water.

Finally, be sure to ask your Family Wellness Chiropractor for any advice they can offer regarding the recommended time for sun exposure for your area.

Dear Patient,

Dr. Erin is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.

This newsletter is provided to you by:

**SLO Chiropractic Center
Dr. Erin Parsons
at 2066 Chorro Street
San Luis Obispo, CA 93401
805.541.2225**