



The Wellness Family

Dr. Greeley 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 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 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 their more widespread use came the development of waterproof or sweat-proof products and eventually the claim that 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-Methyl-benzylidene 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) found in an estimated 70% of all sunscreens.

When the U.S. Food and Drug Administration (FDA) first began considering sunscreen regulations, it grandfathered active ingredients from the late 70's without reviewing the evidence of potential dangers.

In February 2019, they reported "insufficient health and safety data to designate 12 of the 16 sunscreen filters allowed for use in the U.S. as generally recognized as safe and effective". Unfortunately, these 12 include some of the most commonly used UV filters. According to their report, the majority of these active ingredients have limited or no data defining their absorption rate.



Rather than slathering a toxic concoction of chemicals on your children, consider limiting sun exposure...

Absorption Concerns

According to the FDA, Avobenzone, Oxybenzone, Octocrylene and Ecamsule (four common chemicals used in sunscreens) are absorbed into the blood at levels that may pose health risks. In his article, "Consumer Reports Recommends Sunscreens that Seep Poison into Your Bloodstream", Dr. Joseph Mercola reviews the FDA report in some detail and points out that the majority of sunscreens are now deemed unsafe for routine use. The FDA report proposed new regulations, but they haven't been implemented yet.

The Environmental Working Group (EWG) has also reviewed the new FDA report and the available data for human exposure and toxicity of nine commonly used sunscreen chemicals. The most worrisome of these is Oxybenzone, which has been determined to be a weak estrogen that acts as an endocrine disruptor and has been linked to reduced sperm count in men and endometriosis in women.

The Consequences

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. 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.

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.

The newly proposed FDA regulations would finally require sunscreens and sunblocks to also protect against UV-A rays. However, this will have its own worrisome consequences.

Vitamin D and Sunshine

The most powerful and natural vitamin D is produced by the body when in direct sunlight, preferably the 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 variant is D3 and the most reliable source is sunlight.

In the past decade, studies have shown that vitamin D3 cuts the risk of several types of cancer by as much as 65%. Of course, there are supplements available but 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 60 years of indoctrination. Having been told repeatedly that the sun's rays cause cancer, sunburns will result in deadly melanoma, and it is 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.

The *American Academy of Dermatology* estimates that almost 200,000 new cases of melanoma will be diagnosed in the U.S. in 2019 and invasive melanoma is projected to be the fifth most common cancer in both men and women.

Considering the prevalence of sunscreen propaganda for the last 60 years, it's safe to assume that most people diagnosed with melanoma wear sunblock 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 D3 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 D3. 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, ask your Family Wellness Chiropractor for any advice they can offer regarding the recommended time for sun exposure for your area.



*Dear Patient,
Dr. Greeley 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.*

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