

Common Sunscreens Shown Dangerous and Ineffective

By Dr. Ayo Bankole

As skin cancer rates climb so to has the use of sunscreens. Unfortunately according to the work of the research team at the Environmental Working Group (EWG), a non-profit organization that studies the relationship between environmental toxins and human health, we now know the skin protectant properties of common sunscreens falls short of many manufacturer's claims. In their study of 952 name-brand sunscreens, they found that only one of every five products provided adequate protection from the sun while being free of ingredients of questionable safety.

Ultraviolet radiation

Only one in seven products protect skin from UVA radiation according EWG researchers. Because UVB radiation is most closely correlated with sunburns, and skin cancer, sunscreen manufactures design products primarily for UVB protection denoted by the sun protection factor or SPF. The SPF does not confer UVA protection. It is however, UVA that penetrates to the deeper layer of skin as compared to UVB and is linked to premature skin aging, wrinkling and sun-related skin damage. Many sunscreen formulations lack UVA protection. Some researchers are considering UVA radiations potential involvement in skin cancer also.

Most Sunscreens Don't Work

In spite of claims such as "all day protection," according to EWG, up to 48% of sunscreen products break down in as little as thirty minutes of sun exposure. Most sunscreen ingredients are intended to protect skin by absorbing UV rays which, consequently causes their breakdown. What's more, there are currently no standards or requirements for stability of sunscreen ingredients.

Sunscreen Ingredients Linked to Harm

Lack of safety standards have allowed sunscreen ingredients to flood the market without adequate scrutiny. The commonly used chemical oxybenzone has been shown in studies to be associated with lower birth weight daughters, and to mimic estrogen, effecting normal hormone balance. It is also shown to accumulate in humans, and affect the brain and nervous system in high doses according to animal studies. Padimate O, a derivative of the once-popular PABA sunscreen ingredient has been shown in research to release free radicals, damage DNA, have estrogenic activity, and to cause allergic reactions in some people.

Tips to Choose & Use Sunscreen

The American Cancer Society recommends an SPF rating of at least 15. Very little extra UV protection is afforded beyond an SPF of 30. My favorite ingredients are zinc oxide and titanium dioxide because they reflect both UVA and UVB rays, and remain relatively stable compared to other ingredients. They are probably the safest and most effective sunscreen ingredients. Avoid sprays and powders which may contain micronized particles or nanoparticles which may be harmful when inhaled. No matter how good a product you choose, improper application retards protection. To receive the SPF

protection you paid for, apply your sunscreen liberally, as a thin layer awards little protection. Also, sunscreen needs to be applied at least thirty minutes before sun exposure and then re-applied every two hours.