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Most Sunscreens Aren't Up to the Task

They offer some protection, but you need to take additional steps to avoid skin cancer

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THURSDAY, July 5 (HealthDay News) -- Beachgoers lulled into the breezy, bronzed glow of summer take note: Most sunscreens don't live up to their promise of protecting against harmful ultraviolet rays, a new study contends.

"Sunscreens just aren't as good as people think they are," said Dr. James Spencer, a dermatologist in St. Petersburg, Fla. "They aren't perfect, but they are the best tool we have."

"There's no such thing as a safe tan," added Dr. Darrell Rigel, a clinical professor of dermatology at New York University who does laboratory research on melanoma and other skin cancers.

The culprits in sunshine are the ultraviolet rays, particularly UVA and UVB.

Rigel said that sunscreens were designed initially to block out UVBs, because scientists thought these rays were to blame for sunburns and skin cancer. More recent studies suggest that UVA rays are also dangerous. But most current sunscreen labels don't offer a measure of UVA protection, he said.

While there's agreement on how to measure UVB rays, the U.S. Food and Drug Administration has spent almost three decades trying to determine how best to measure UVA rays. There are at least six different ways to do it, and the health agency hasn't settled on the best one. The agency said it would have a final answer in the coming months.

Spencer is working with the American Academy of Dermatology (AAD) to create a seal of approval for sunscreens, much like the American Dental Association has done. Companies wanting to carry the AAD seal would have to submit independent measures of their product to show that it offers adequate SPF protection and provides "broad-spectrum" protection against ultraviolet rays, as well as evidence of durability.

Meanwhile, unless you're a chemist or a dermatologist, it's tough to make sense of labeling on sunscreen lotions.

For one thing, many products claim "broad-spectrum" protection, meaning they block both UVA and UVB rays, and that means absolutely nothing, Riger said. He added that consumers should look for chemicals like oxybenzone, avobenzone and parsol 1789 that block both UVA and UVB rays. European manufacturers use another powerful UV blocker called mexoryl. L'Oreal just introduced a product, called Anthelios SX, with this newly approved ultraviolet ray blocker.

One of the biggest problems with sunscreens is the stability of the chemicals used -- some break down faster than others when exposed to sunlight and lose their potency to block UVA and UVB rays. Riger said that Neutrogena's Helioplex is one product that maintains stability over time.

More than a million new skin cancers are diagnosed each year in the United States, and rates are climbing. The most aggressive and deadly is melanoma, diagnosed in 60,000 people a year. Unchecked, melanoma thickens and spreads

and is responsible for about 8,000 deaths a year, according to federal statistics. The two other types of skin cancer -- basal cell and squamous cell -- are slow-growing and can generally be caught in time for successful treatment. Still, squamous cell carcinoma claims about 2,200 lives a year.

"The development of cancer is not a single event," Spencer explained. Unlike some other cancers, "the cause of skin cancer is not confusing," he added. "One thing causes it -- overexposure to the ultraviolet rays of the sun. Period. It's a short-term cosmetic benefit with long- term damage."

The Environmental Working Group, a consumer advocacy organization, recently set out to analyze hundreds of scientific studies on sunscreens to develop a list of the best and the worst sun products.

The group analyzed 400 scientific studies (on 780 name-brand sunscreens) to see how many are actually safe and effective. One in every eight did not protect against UVA rays, the study found. And only 16 percent of the products studied were both safe and effective. This can include anything from harmful chemicals used in the products to false labeling that states that it can offer all-day protection.

"No one had ever looked at the safety or efficacy of sunscreens," said Richard Wiles, executive director of the Environmental Working Group. The FDA has approved 17 chemicals for use in sunscreens, and only four of them provide UVA protection, he said.

The working group found that 84 percent of the sunscreens studied did not offer adequate protection from the harmful effects of the sun. They did identify 128 products that passed the rigors of testing.

The best on the list, Wiles said, include products with zinc oxide or titanium oxide that provide broad-spectrum effectiveness. What's more, they don't easily break down in the sun, which means they remain active longer. The group only studied products with SPF 15 or higher.

While dermatologists agree that sunscreens should be used to protect against harmful ultraviolet rays, there are other things people can do short of staying in the shade. Wear protective clothing and stay out of the sun between the hours of 11 a.m. and 3 p.m., when the UV rays are the strongest and most damaging. And, Rigel said, sunscreens should be reapplied every two hours in the sun.

Many dermatologists promote sensible sun exposure. After all, sun is a powerful source of vitamin D, and a few minutes a day several times a week is all the body needs to maintain its store of the vitamin. Vitamin D promotes bone formation and mineralization, and there is growing evidence that it powers the immune system's ability to fight cancer cells.

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