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YOUR HEALTH

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The ABCs of SPF

New ingredients offer extra layer of protection from the sun's deadly rays

BY HOLLY AUER
The Post and Courier

There are a few extra letters in the alphabet soup of sunscreen chemicals these days. Turns out that a super-high SPF won't protect you from cancer-causing UVA rays, even if it does a good job at banishing the burn caused by UVB. To really stay safe, you'll need something with a hit of heavy metal: zinc, titanium or something called avobenzone.

Got it? Probably not. That's why we've got the back story to help you make smart choices before heading outside for some summer fun.

"If it doesn't have one of those three ingredients, you're not getting any significant UVA coverage," says Dr. Karl Gruber, a Trident Medical Center pathologist who has developed his own broad-spectrum sunscreen line. "You shouldn't buy it, or if you have it, you should just throw it away."

With the recent addition of chemicals designed to protect skin from UVA rays — the kind that give sunbathers their coveted bronze glow but cause age spots, wrinkles and the deadly skin cancer melanoma — it's a new day for sunscreens in the United States. The newest ones add a shield that could actually save your life.

Skin cancer warning signs

This year in the United States, more than 108,000 people will be diagnosed with melanoma, the skin cancer that kills some 8,000 people annually, according to the American Academy of Dermatology. Not all melanomas are related to sun exposure, but excessive exposure to ultraviolet rays are fueling the massive increase in the number of people with the disease.

Dermatologists recommend that people have a full-body check for suspicious moles at least once a year, and inspect their own moles once a month. Any of these characteristics can be a sign of cancer, says Charleston dermatologist Dr. Todd Schlesinger:

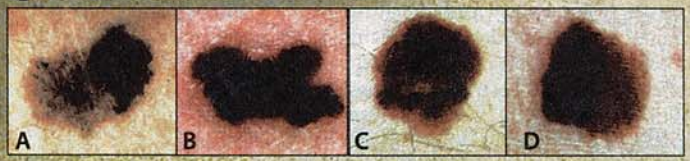
A — Asymmetry: One side that's a different size or shape than the other.

B — Border irregularities: The mole's edges are not uniform.

C — Color: Different shades in the same mole.

D — Diameter: Anything larger than a pencil eraser.

E — Evolution: Moles that change over time.



– Holly Auer

The ABCs of SPF

The latest formulations, many of them long available in Europe and Australia but only recently approved by the Food and Drug Administration for sale to sun-worshipping Americans, include UVA blockers that work partly by reflecting and dispersing rays back into the sky, similar to the way light shines through a crystal, Gruber says.

That's why you'll need to look beyond the ever-soaring SPF rating — some brands now tout a sun protection factor of 70 or more — to get maximum protection. In fact, doctors say, those numbers can be misleading, since they only measure a lotion's ability to block UVB rays.

The FDA is expected to weigh in on sunscreen labeling in coming years, and some speculate the agency will ax those sky-high SPF ratings, topping allowed claims at "30-Plus."

"An SPF of 15 blocks 96 percent of UVB rays, and an SPF of 30 blocks 98 or 99," say Charleston dermatologist Dr. Todd Schlesinger. "You're getting little additional benefit going above 30."

What you are getting, though, is extra chemicals, which Gruber says may irritate the skin, especially in small children. In fact, he started his sunscreen line, LUCA Solar Protection (www.lucasunscreen.com), after his son complained that the lotion burned and stung his skin, no matter what kind Gruber and his wife, Georgia, slathered on.

"It's just pure marketing, and unfortunately it's targeted toward kids," Gruber says of the trend toward high SPFs. "Parents want to think they're doing the best thing for their kids, but in actuality kids are more irritated by this stuff than adults are."

On average, a coat of SPF 15 will keep people from burning for two hours, while a rating of 30 buys four hours of protection. SPFs above that level, Gruber says, offer only an extra 10 minutes or so. But again, that's only providing half the protection you need; a UVA blocker is necessary, too.

Popular brands, including Neutrogena, Coppertone and Banana Boat, have all added those ingredients to some of their lotions and sprays, but labeling can be tricky if you don't know the lingo. European labels including La Roche-Posay and L'Oreal, plus the Australian-developed Blue Lizard also offer UVA-blocking creams.

The U.S. hasn't yet adopted a rating system for UVA protection, but in other countries, the measure of "critical wave length" is used. For optimal protection, try to find one with a rating above 370, Gruber says.

Women who wear makeup with SPF are encouraged to add an extra layer of UVA/UVB sunscreen (often found as part of a daily moisturizer) underneath, Schlesinger says. For full-body exposure, aim for smoothing on about an ounce and a half of lotion, or enough to fill a shot glass, to get the most protection. And remember that the claim of "waterproof" doesn't mean you can lotion up just once for a whole day in the water. Add another coat as soon as you dry off.

But it's not just beach or pool time that leaves people susceptible to skin cancer. Doctors increasingly see patients with cancers on their faces and left arm or hand from driving, since car windows don't block UVA light. All those other quick pops out of the house and the office add up, too, so doctors say daily use of a UVA/UVB sunscreen is crucial.

"UVA damage is cumulative," Gruber says. "Going back and forth to the car and mailbox can equate to a week's worth of sitting on the beach baking in the sun."