

Sunscreen: Skin cancer becoming more common

BY PAM DEFIGLIO

Daily Herald Staff Writer

Posted Monday, May 29, 2006

It's like finding out your best friend is only telling half the truth. The SPF numbers on sunscreens are only giving us half the story. And the missing half could be dangerous. What many people don't know is that sunscreens sold in the United States protect against sunburn, but might give us little or no protection from skin cancer and wrinkles.

SPF numbers only indicate how much they protect our skin from the sun's UVB rays, which cause sunburn. Unfortunately, they give us no idea whether they provide any protection from the sun's UVA rays. Those are the ones scientists consider the primary culprit in skin cancer and the sun's aging effect on skin. That's bad news, but here's worse: even though scientists have known about UVA damage since the 1990s, only four ingredients that fully protect skin from UVA rays are legal in the United States. One just became available in a new Neutrogena sunscreen, but most sunscreens sold in suburban Chicago drugstores don't contain these ingredients.

One large law firm has gone after five manufacturers of sunscreens for this very reason. Its class-action lawsuit accuses them of labeling their products "broad spectrum" or "UVA/UVB protection," when their sunscreens' active ingredients might protect against only a portion of the UVA spectrum. The Skin Cancer Foundation worries the lawsuit will lead people to forsake sunscreen. It's still crucial to use sunscreen and to stay out of the sun when possible, the foundation stresses.

The U.S. Food and Drug Administration is considering approval of several new sunscreen ingredients that have been used for years in Europe and Canada. Meanwhile, Americans are developing melanoma at a frightening pace. Skin cancer is the most commonly occurring cancer in the United States, according to the Skin Cancer Foundation. "What you don't know about sunscreen could kill you," warns Paula Begoun, a skin care and cosmetics-industry expert and author of "The Beauty Bible" (Beginning Press, \$18.95). Smart consumers don't have to wrinkle up and wait for better formulations. Begoun and other experts explain what you can do today.

Active ingredients

For some people, the desire to keep wrinkles at bay provides strong motivation to protect their skin. And they're on the right track. "Depending on the expert you talk to, they'll tell you that between 60 to 80 percent of what we think of as aging skin is really sun damage," says Begoun. "So if you're buying expensive wrinkle creams and not wearing sunscreen, it's like smoking and saying, 'but I'm eating broccoli!'"

Unfortunately, skin-damaging UVA rays are just as strong at 9 a.m. in the winter as they are on a blazing July afternoon. "UVA rays are constant all day throughout the year," says Dr. Bob Polisky, a dermatologist in Elk Grove Village. If you don't care to look like squashed crepe paper on a gym floor, get in the habit of looking at sunscreens' active ingredients, experts say.

Dr. Marianne O'Donoghue, who has a dermatology practice in Oak Brook, says to choose sunscreens with the following active ingredients: titanium dioxide, zinc oxide or avobenzone, which is also called Parsol 1789. Or, she adds, look for the Neutrogena sunscreens out this spring, such as Age Shield, which contain the new ingredient helioplex. It's a stabilized synthesis of avobenzone and oxybenzone. Helioplex didn't require FDA approval because it's created from two other substances on the approved list, says Matthew Holman, interdisciplinary scientist team leader at the FDA office in Silver Spring, Md. But he couldn't comment on the status of two specific sunscreen ingredients that many Americans are clamoring for: Mexoryl, made by the French cosmetics giant L'Oreal, and Tinosorb, a product of the European company Ciba.

Dr. Leslie Baumann, professor of dermatology at the University of Miami and author of "The Skin Type Solution," says she wishes FDA would approve these two ingredients because they make great sunscreens.

She uses a product containing mexoryl on her own skin. Because FDA hasn't approved them yet, products containing these ingredients can only be purchased from international sources over the Internet.

If you'd rather purchase sunscreen locally, Begoun says zinc oxide and titanium dioxide at 3 to 5 percent concentrations do the job well. When you're choosing your sunscreen, look for one with SPF 15 or higher, as well as a UVA-shielding active ingredient. Begoun stresses that higher SPF numbers won't give you any stronger protection from UVB rays. They'll just protect you for a longer time. Remember, she says, that even an SPF 70 won't protect you from UVA rays if it doesn't contain UVA-shielding ingredients. She also urges people with darker skin tones to follow the sunscreen rules. While darker skin gives some protection from skin cancer, she says, the sun can cause discoloration and an ashy complexion.

Beware the tiny

Even though titanium dioxide and zinc oxide are long-established, safe ingredients, a consumer group says the newer forms present a danger. Remember the thick white stuff lifeguards used to smear on their noses? That was zinc oxide. People didn't like it because it was so thick and white. Today's formulations are clear lotions, but these critics say they might be dangerous. "The active ingredients have been shrunk to a certain level, that of nanoparticles. One physical representation of that is they become transparent," says George Kimbrell of the International Center for Technology Assessment in Washington, D.C.

Nanoparticles are so new nobody knows whether they're safe. They're so tiny - the breadth of a human hair is 80,000 nanometers - that some scientists fear they can zip through the skin and into our blood and respiratory systems. Recently, a cleanser made with nanoparticles caused severe respiratory problems in 80 people in Germany. His organization is suing the FDA, asking the agency to better regulate nanoparticles. Makers of sunscreens using the ingredients, made by giant chemical company BASF, say they're safe. BASF has done extensive safety testing of them and has found that none of the substances get into the human bloodstream, says Jeff Bedard, CEO of Crown Laboratories, makers of Blue Lizard sunscreens.

Kimbrell, of the ICTA, advises looking for titanium dioxide and zinc oxide formulations that are white in color, and somewhat thick or viscous. A list of products his organization says contain nanoparticles is at www.foe.org

How to do it right

After you've picked out a great sunscreen, Dr. Baumann says to apply it first thing in the morning, right after your shower. UVA rays go through glass, she says, meaning sunlight coming through windows can wield its destructive force. Begoun reinforces this point. "Where there is daylight, there is sun damage," she says. "And it's a danger to think sun season is only in the summer. It's 365 days a year." One of the areas where wrinkles show up first is around the eyes. But that's exactly where many people hesitate to apply sunscreen, for fear it will get into their eyes. "Use titanium dioxide around the eyes, or use sunscreen in stick form. It's less likely to run," advises Dr. O'Donoghue. She also tells patients who exercise outdoors to wear terrycloth headbands so sweat won't run into their eyes.

Begoun suggests wearing sunglasses, which will also protect the eyes from sun. And for women, she advises using a moisturizer or foundation that contains sunscreen. O'Donoghue also emphasizes the American Academy of Dermatology's warnings: Wear a hat and protective clothing and stay out of the sun from 10 a.m. to 4 p.m., when UVB rays are strongest. The need is evident: She has seen skin cancer in people as young as 22. Begoun has advice tailored to men - slather sunscreen on your forehead and the back of your neck, where you don't have long hair to protect you - and to women. Since women generally use multiple products on their skin, it's important that they apply sunscreen last, she says, right before foundation. Applying moisturizer after sunscreen will just dilute the sunscreen. It's important to reapply sunscreen every two hours when you're out in the sun. Most people forget this step, but the experts stress it's important. Moisture washes sunscreen away, so you must reapply it after swimming, bathing or sweating. Some women don't like slapping sunscreen over their makeup, and Begoun has a solution for them. "I have oily skin, and on my face I use a foundation with SPF 15, and throughout the day I apply pressed powder with SPF 15," she says. For this to work, you have to give your entire face a good dusting of powder.

Applying plenty of sunscreen is key. The AAD recommends using a full ounce (visualize a shot glass full) to cover the face and body. The worse thing you can do, Begoun says, is to buy an expensive sunscreen, especially when drugstore brands contain the same active ingredients. "If it costs \$100 for three ounces, are you really going to apply the recommended ounce every day?" she asks. "An expensive sunscreen is dangerous."