

Sun protection 101

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By Jennifer Rothacker - McClatchy Newspapers, Charlotte Observer
<mailto:jennifer@momscharlotte.com>

As the heat and sun settle in for summer, the calls to protect your skin from damaging rays begin. But with so many choices of sunscreens, sunglasses, hats and even sun-protected clothing, it might seem easier to hide out in a dark closet. Go ahead, break out the bathing suit. We've got the skin-care basics from two experts in the field: doctors Nancy Thomas, associate professor at UNC's Department of Dermatology Lineberger Comprehensive Cancer Center, and Kelly Nelson, assistant professor at Duke University Medical Center's Department of Dermatology.

Who needs sun protection?

Everybody, both doctors agree. The sun can damage your skin throughout your life, from immediate harm such as burns to longer-term effects such as age spots and cancer. Although dark-skinned people are slightly less sensitive to the sun, they too can fall victim to its damaging rays. A tan means skin damage. Use a spray-on tanner to get your glow.

Even if you're inside much of the day, you're exposed walking to your car, into the grocery store or into work. And don't make the vitamin D argument, which says sun exposure is necessary to absorb the highly important vitamin. Just take a vitamin supplement, the doctors suggest.

What are UVB, UVA and SPF?

UVB rays are ultraviolet rays that penetrate the upper layers of the skin. They cause the more immediate sunburn effect.

UVA rays penetrate deeper and cause aging to the skin. These rays have just recently caught the attention of scientists, and more sunscreens now protect against them.

SPF is a measuring system for how long a product protects the skin against the sun. The higher the SPF, the more protection it offers.

What to use

Look for the words "Broad-spectrum sunscreen" or "protects against UVA and UVB rays." From there, you basically have two types of sunscreens to choose from: chemical-based and physical blockers.

Chemical-based sunscreens use a formulation of chemicals to ward off the sun's damaging rays. Such products are plentiful, easy to put on and effective. There is concern about parabens, preservatives that some scientists feel may have estrogen-mimicking properties. For small children, it may be prudent to seek out paraben-free sunscreens. There are organic sunscreens, but reviews of those aren't overly positive.

Physical blockers include the ingredients zinc oxide or titanium dioxide, which physically reflect the sun off your face. They have no problematic chemicals, but they can be more bulky to deal with (remember lifeguards back in the day who coated their noses in thick white cream?). Although today's formulas aren't white when they go on, they are still thicker.

SPF choices

The FDA recommends a 15 SPF or higher, but both doctors say to go with at least a 30, if not a 45. Higher is better, because most people put their sunscreen on too thinly, which makes a 30 SPF turn into something like a 10 SPF. Hedge your bets and start strong.

If you're going to be active that day and sweat a lot, or plan to be in the water, get a waterproof version.

Brands the docs like: Both experts like Vanicream Sunscreen because it's free of irritating chemicals and goes on smoothly. Nelson also recommends Neutrogena Ultra Sheer Dry Touch. Both are available at most drugstores.

Rules for using

The longtime rule still stands: about 2 ounces, or the equivalent of a shot glass. (Note, few of us actually accomplish this.)

If you're going to be inside for most of the day, one application in the morning should be fine. If you're going to be active and get sweaty or wet, reapply about every two hours.

Put your sunscreen on about 20 minutes before going outside. Don't put sunscreen on and then immediately jump in the water – it will wash off.

Does SPF clothing work?

The fairly new line of shirts and swimsuits weaved with special sun-blocking properties do work, say both doctors. Although they can be expensive, they save in the long run because they cover areas you won't need to cover with sunscreen.

Such clothing is UPF rated, which is similar to the SPF ratings for sunscreens. The higher the number, the better it protects. Most are somewhere between 30 and 50 UPF. Be sure to follow the care instructions.

In addition, it's smart to wear hats and sunglasses. Any hat made of woven material can protect the head, which can also get burned (take note, receding-hairline men), and sunglasses with 100 percent UV protection are adequate for the eyes.

Special tips for kids

Keep your family safe this summer by following these tips from the American Academy of Pediatrics (AAP):

Babies under 6 months:

The two main recommendations from the AAP to prevent sunburn are to avoid sun exposure, and dress infants in lightweight long pants, long-sleeved shirts, and brimmed hats that shade the neck to prevent sunburn.

However when adequate clothing and shade are not available, parents can apply a minimal amount of sunscreen with at least 15 SPF (sun protection factor) to small areas, such as the infant's face and the back of the hands. If an infant gets sunburn, apply cold compresses to the affected area.

For young children: Apply sunscreen at least 30 minutes before going outside, and use sunscreen even on cloudy days. The SPF should be at least 15 and protect against UVA and UVB rays.

For older children:

The first, and best, line of defense against the sun is covering up. Wear a hat with a three-inch brim or a bill facing forward, sunglasses (look for sunglasses that block 100% of ultraviolet rays) and cotton clothing with a tight weave. Stay in the shade whenever possible, and limit sun exposure during the peak intensity hours - between 10 a.m. and 4 p.m.

Use a sunscreen with an SPF of 15 or greater. Be sure to apply enough sunscreen - about one ounce per sitting for a young adult. Reapply sunscreen every two hours, or after swimming or sweating.

Use extra caution near water, snow, and sand as they reflect UV rays and may result in sunburn more quickly.

Heat stress in exercising children

The intensity of activities that last 15 minutes or more should be reduced whenever high heat and humidity reach critical levels.

At the beginning of a strenuous exercise program or after traveling to a warmer climate, the intensity and duration of exercise should be limited initially and then gradually increased during a period of 10 to 14 days to accomplish acclimatization to the heat.

Before prolonged physical activity, the child should be well-hydrated. During the activity, periodic drinking should be enforced, for example, each 20 minutes, 5 oz of cold tap water or a flavored sports drink for a child weighing 90 lbs, and 9 oz for an adolescent weighing 130 lbs, even if the child does not feel thirsty.

Clothing should be light-colored and lightweight and limited to one layer of absorbent material to facilitate evaporation of sweat. Sweat-saturated shirts should be replaced by dry clothing.

Practices and games played in the heat should be shortened and more frequent water/hydration breaks should be instituted.