

# 5 Things You Must Know About Sunscreen

There are more than 1,000 products on the shelves. Here, 15 terrific nonyucky, nonsticky, no-burn options.

N A PERFECT WORLD sunscreen would glide smoothly onto your skin, imperceptibly and safely providing all of the protection you need until you wash it off. The reality, as we all know, is far different: Sunscreen often drips into eyes, feels greasy, irritates skin, and stains clothing. Worse, as our tests this year and in the past have shown, sunscreens don't always shield your skin as well as their labels claim. People like to think they can trust particular brands or ingredients, but that's not always the case.

We measured SPF (sun protection factor) in 34 sunscreens by applying different products to panelists' backs and having them soak in a large tub of water for the amount of time the sunscreens were claimed to be water-resistant (either 40 or 80 minutes). When the panelists got out of the water, we exposed their sunscreen-coated skin to ultraviolet (UV) light. The result: Almost a third of the products tested fell short of the SPF claim on their labels. We also found reasons to be concerned about claims of broad-spectrum protection and of "natural" sunscreens.

But not all of the news is bad. This year, we found nonsticky, nonstinky products that also do a great job of protecting your

skin, many of them at affordable prices. So when you're struggling to choose from a huge selection (more than 1,000 lotions, sprays, foams, and gels are on the market), look for our 15 recommended products and keep these five facts in mind:

#### 1. You Can't Always Trust the Claimed SPF

Considering that SPF is usually the feature people look for when they shop for sunscreen, our findings about SPF protection were troubling. Eleven products did *not* deliver their promised protection and missed the mark by anywhere from 16 to 70 percent. (See Ratings, on page 42.)

Even so, you'd still be pretty well covered, at least in some cases. Most dermatologists and other experts recommend using a sunscreen that delivers an SPF of 30 or higher, which blocks 97 percent or more of the sun's UVB rays, the ones that cause you to burn and contribute to the damage that can lead to skin cancer. Three of the sunscreens that fell short of their claims still had an SPF higher than 30: Coppertone UltraGuard SPF 70+ tested as an SPF 59, Coppertone ClearlySheer for Beach & Pool SPF 50+ tested as an SPF 37, and Banana Boat Sport Performance with Powerstay Technology SPF 100 tested as an SPF 36.

If a sunscreen still gives you adequate protection, why does it matter if the SPF is lower than what's promised? First, the Food and Drug Administration requires that sunscreen manufacturers test their products and label them correctly. Most important, we found some cases where a sunscreen dipped below an SPF of 30 despite claiming that number–or higher–on the label. That was the case for eight of the 34 sunscreens in our tests; one, Yes To Cucumbers Natural SPF 30, had an average SPF of just 14.

Those findings are troubling, especially when you consider that people don't always apply the right amount of sunscreen, fail to reapply it often enough, or don't minimize their sun exposure (see "Slather It On!" on page 41). For instance, ultrahigh-SPF products tend to lull users into staying in the sun longer, possibly overexposing them to UVA and UVB rays.

#### 2. Your Sunscreen May Be Doing Only Half of Its Job

The FDA mandates that sunscreens labeled "broad spectrum" protect against UVB and UVA rays. Unlike UVB rays, which are more prevalent in the summer and between 10 a.m. and 4 p.m., UVA rays are constantly present during the day–no matter the season or weather–and they can pass through clouds and even glass. UVA rays act stealthily–they're less intense, and their attack doesn't leave us looking red or feeling hot like UVB rays do, but they're a potentially more insidious threat to your health. UVA rays have a longer wavelength than UVB, so they penetrate deeply into the skin. They can accelerate aging-related skin damage, raise the risk of melanoma, and suppress the immune system.

The FDA requires that manufacturers test their sunscreens in order to call them broad spectrum, but it's a pass/fail test. Different sunscreens have a wide range of UVA protection, yet they're all labeled "broad spectrum," leaving the impression that one broad-spectrum sunscreen is as good as another. That's why evaluating the degree of UVA protection is an important part of our testing.

To isolate the degree of UVA protection, we use a test that's modeled on the one performed in the European Union and is different from the test the



**CHOOSE WISELY** SPF claims can't be trusted. Use our Ratings chart to be sure. Look for the  $\square$ .

SUN NUMBERS

of the skin damage we think of as 'aging' may actually be due to sun exposure.



63% of skindamaging UVA rays penetrate clear glass. UVB is mostly blocked, so you can't get a sunburn through a window.



FDA requires of U.S. manufacturers. In the EU, a broad-spectrum sunscreen must provide UVA protection equal to one-third or more of the SPF value. (We use our tested SPF findings for that calculation, not the SPF on the label.) We chose that test because it allows us to differentiate the degree of UVA protection among sunscreens. All but two of the sunscreens (EltaMD UV Aero SPF 45 and Aloe Gator SPF 40+) should meet the U.S. standard for broad spectrum, but our tests indicate that eight of them might not have passed the more specific EU test. Another concern is that Aloe Gator SPF 40+, which got a Poor UVA rating, provided excellent SPF protection that would suppress burning, potentially causing people to bask longer in the sun.

#### 3. 'Natural' Sunscreens Don't Work All That Well

Though "natural" has no real definition on a sunscreen label, the term is often used to refer to products that contain only the minerals zinc oxide and/ or titanium dioxide as active ingredients. Mineral sunscreens are less likely than those that contain chemicals (such as avobenzone) to irritate skin or cause allergic reactions. (That's why dermatologists routinely recommend them.) But we've seen in our tests over the years that these so-called naturals are also less likely to offer skin the complete protection it needs. Two years ago, we gave just one product a Very Good rating for UVA and a different one a Very Good rating for UVB. Good was the highest rating for a mineral sunscreen for both UVA and UVB last year.

The growing popularity of mineral sunscreens led us to test several this year. Our results weren't much better than in the past: Of the five mineral body sunscreens we looked at, three rated Excellent for UVA– but the same three received Fair ratings for UVB. When it came to SPF, only two met their claims–with the others seriously missing the mark. In addition to Yes To Cucumbers Natural SPF 30 averaging an SPF of 14, CVS Baby Pure & Gentle SPF 60 delivered an SPF of 18, and Vanicream SPF 50+ supplied an SPF of 17. None of the mineral-only sunscreens is on our list of recommendations, but we gave California Baby Super Sensitive SPF 30+ a Good rating for UVA and UVB. If you want a sunscreen with no chemicals, consider that one.

One likely reason mineral sunscreens routinely score so poorly: To provide good protection, sunscreens need to form a uniform film on the skin, explains David C. Steinberg, president of Steinberg & Associates, a personal-care-products consulting company in Plainsboro, N.J. And even though most mineral products contain micronized titanium dioxide, zinc oxide, or both, they're still particles–so they don't create a smooth, uniform surface. Aren't mineral sunscreens safer? Some people think so because they sit on the surface of the skin and aren't absorbed the way chemical sunscreens are. But mineral sunscreens that go on clear—as many do these days—may contain nanoparticles, which may be absorbed. The truth is, there are safety concerns with many active sunscreen ingredients—chemical and mineral. The science to rank them in order of safety isn't there, but it is clear that the risks don't outweigh the benefits of using sunscreen.

#### 4. You Can Get Super Protection at a Low Price

It's true that our top-rated sunscreens are also the most expensive: La Roche-Posay Anthelios 60 Melt-in Sunscreen Milk (SPF 60) costs \$36, or \$7.20 per ounce, and Vichy Capital Soleil 50 Lightweight Foaming Lotion (SPF 50) costs \$28.50, or almost \$6 per ounce. But there are many sunscreens that were far less costly and worked essentially just as well. In fact, all of the other 13 CR recommended sunscreens were a fraction of the price—\$1.65 per ounce on average. How low can you go and still get excellent protection? At \$9 per bottle (56 cents per ounce), Walmart's Equate Ultra Protection SPF 50 was the fourth-highest-rated sunscreen and is a CR Best Buy.

#### 5. Sunscreen Doesn't Have to Be Sticky and Stinky

Even the most protective and cheapest sunscreen isn't going to do you much good if you don't use it. And for many people, the "yuck factor," as one CR reader called it, is as important as the SPF. There are two reasons sunscreens can feel greasy: Most of their active ingredients are oily, and especially in higher-SPF sunscreens, those ingredients can make up as much as 35 percent of the product. Yet our panel of sensory testers, who analyzed the feel and scent of all of the products in our Ratings, found that

## Our recommended sunscreens average out to \$2.30 per ounce.

aesthetically pleasing sunscreens do exist. In fact, though most sunscreens had an oily feeling when you first put them on, they also rubbed in within about 30 seconds and didn't leave white streaks on the skin.

Luckily, many of the sensory standouts fared well in UVA and SPF testing, too. Depending on which scent you prefer, there are a host of very protective options that left little or no residue. One is L'Oréal Quick Dry Sheer Finish 50+, which left skin soft, wasn't sticky, and imparted a subtle floral aroma with hints of citrus and evergreen. If you want a uniquely light scent (think herbal and outdoorsy), consider Caribbean Breeze Continuous Tropical Mist SPF 70. If a classic beachy fragrance is more to your liking, try one of these three sunscreens: Coppertone Sport High Performance AccuSpray SPF 30, Equate Ultra Protection SPF 50, and Equate Sport Continuous Spray SPF 30. If you're more a fan of a tropical fruit and coconut scent, Banana Boat SunComfort Continuous Spray SPF 50+ will keep you smelling like a piña colada. Ocean Potion Protect & Nourish 30 calls its fragrance "scent of sunshine"; we're not sure what sunshine smells like, but it did have a bouquet reminiscent of orange Creamsicle that became more floral over time. Prefer no fragrance? Coppertone UltraGuard SPF 70+ had a barely noticeable scent.

# UVAs vs. UVBs

These two rays affect skin differently

#### UVA rays do damage and

penetrate the deepest. UVA rays are long enough to reach skin's dermal layer, damaging collagen and elastic tissue. That layer is also where the cells that stimulate skin darkening are found; that's why UVA rays are considered the dominant tanning rays. (UVA rays are also used in tanning beds.) Though many people still think a tan looks healthy, it's actually a sign of DNA damage—the skin darkens in an imperfect attempt to prevent the further injury, which can lead to the cell mutations that trigger skin cancer.

UVB rays burn and are shorter. The chief cause of reddening and sunburn, UVB rays tend to damage the epidermis, skin's outer layers, where the most common (and least dangerous) forms of skin cancer occur. Those cancers are linked to sun accumulation over the years. Another type of skin cancer, melanoma, is thought to be caused by brief, intense exposures, such as a blistering sunburn. But the skin reddening often doesn't occur for hours after sun exposure, which is why you should reapply sunscreen every 2 hours even if your skin looks fine.



As pleasant as a sunscreen might smell or feel, it probably will sting if it gets into your eyes—and that's why all of the products we tested have instructions telling users to avoid contact with the eyes. But what about the four that specifically are claimed not to irritate? Per our testing, CVS Baby Pure & Gentle SPF 60, Babyganics Mineral-Based SPF 50+, California Baby Super Sensitive SPF 30+, and Well at Walgreens Baby SPF 50 are indeed peeper-friendy.

Most of the sunscreens we tested also cautioned users about the possibility of staining fabrics. When we tested eight that do not include that warning, we found that they *did* leave marks on the four fabrics tried–100 percent cotton, 100 percent polyester, 95 percent rayon and 5 percent spandex, and 90 percent polyester and 10 percent spandex. The best way to minimize the chances of staining is to allow sunscreen to dry on skin before you get dressed.

FIND OUT MORE about sunscreen and how to stay safe in the sun at ConsumerReports.org/cro/sunsafety.



# **Cover Up!**

That old standby-the white T-shirt-still works great

In addition to using sunscreen, it's important to wear clothing that protects you from the sun. Many hats, shirts, and other garments sport a UPF (ultraviolet protection factor) number. What we found: The UPF shirt we tested more than delivered on its claims. Even better: You may not need to shell out for pricey UPF clothing to get good coverage.

We measured the UPF in three white shirts. The Coolibar Girl's Rash Guard UPF 50+, \$32, delivered a UPF of 174. Because UPF indicates what fraction of ultraviolet radiation can penetrate fabric, that means that the garment which is a blend of 84 percent polyester and 16 percent spandex embedded with titanium dioxide that is claimed to last the lifetime of the shirt— allows just 1/174th of UVA and UVB rays to reach the skin.

As impressive as those results are, they don't seem so remarkable when you consider that the two other garments we tested, which aren't claimed to provide any UV protection, did very well, too. A cotton Hanes Beefy-T longsleeve T-shirt, \$13, and an Eastbay Evapor long-sleeve compression crew made of the same polyester/spandex blend as the Coolibar top, \$18 delivered UPFs of 115 and 392 respectively. Even when wet, the Hanes Beefy-T, which is thicker than a regular T-shirt, offered a UPF of 39, which we judge to be a respectable level of protection. Coolibar's UPF actually increased when it got wet, to 211, and Eastbay's dipped to 304.

## Does Europe Really Have Superior Sunscreens?

Considering that more than 17 percent of the sunscreens we tested got an overall score of 90 or higher, it's fair to say that Americans have access to some very good options. That's impressive because the U.S. has just 17 approved active ingredients, compared with 29 in Australia, 27 in Europe, and 20 in Canada.

And only a handful are widely used, notes David Steinberg, president of Steinberg & Associates, a personal-care-products consulting company in Plainsboro, N.J. The others either don't work well or have properties that make them largely unusable. For instance, dioxybenzone makes the skin give off a blue glow as it absorbs UV rays. Menthyl anthranilate smells like bubble gum or grape juice, so it's usually found only in kids' products.

If manufacturers have fewer UV filters to work with, what accounts for the high performance of U.S. sunscreens? "Everyone talks about active ingredients, but inactive ingredients are perhaps as important-if the vehicle doesn't create a uniform film over the skin, you won't get adequate protection," says Steven Q. Wang, M.D., director of dermatologic surgery and dermatology at Memorial Sloan Kettering Cancer Center in Basking Ridge, N.J., and an industry consultant. "Over the years, manufacturers have figured out ways to improve the formulations, so they're more elegant. That means people are more likely to use them-and use them correctly."

## **Slather It On**

That's essentially the answer most experts give when asked how much sunscreen to use. More specifically, you hear that you should use a shot glass full for your entire body, but what if you aren't in a bathing suit?

One rule of thumb is a teaspoon per body part or area: 1 teaspoon for your face, head, and neck; 1 for each arm; 1 for each leg; 1 for your chest and abdomen, and 1 for your back and the back of your neck. Regardless of which SPF you use, apply it 15 to 30 minutes before going outside to allow it to adhere to skin, then reapply at least every 2 hours—more often if you're swimming or sweating excessively.

While we're on the topic of reapplication, note that doing so after you've exceeded a sunscreen's approximate maximum protection time doesn't allow you to stay in the sun longer—that can lead to burning. So if you normally burn in 20 minutes without protection and have already been using an SPF 15 sunscreen for 5 hours, your best choice is not to reapply it but to head for the shade. Don't forget your ears! They're a common ...... site for basal cell skin cancers.

Apply sunscreen to the inside as well as the outside of your arms.

Many people forget to put sunscreen on the tops of their feet. Rule of thumb: 1 teaspoon per body part.

### Find the Best Sunscreen for You

#### **BEST KIDS' BLEND**

#### • A2 Coppertone \$10.50

There's no reason a kid can't use an adult sunscreen or vice versa, but this one has a babylike scent (baby powder and roses), and it provides excellent UVA and UVB protection.

#### **BEST ULTRAHIGH SPF**

- C1 La Roche-Posay \$36
- **C3 Neutrogena** \$10.50
- C4 Caribbean Breeze \$16.50

All of these met their SPF claims in our tests. Neutrogena and Caribbean Breeze are spray sunscreens.

#### UNIQUE SCENT

- C4 Caribbean Breeze \$16.50
- B2 L'Oréal \$11
- C5 Banana Boat \$10.50

If you aren't a fan of classic beachy or tropical fragrances, you might like these woodsy-scented products. Banana Boat is labeled SPF 100 but averaged 36.

#### **BEST BARGAIN**

- A3 Equate \$9 CR Best Buy
- B4 Equate \$8 CR Best Buy

Walmart's store brand delivers topnotch protection and has a classic beachy scent.

#### WON'T STING EYES

- A10 California Baby \$20
- A11 Babyganics \$12
- A12 Well at Walgreens \$8.50
- C6 CVS \$10

#### THE ABCs OF SPF

SPF (sun protection factor) is a relative measure of how long a product will protect you from UVB rays, the ones that cause sunburn. Assuming you use it correctly, if you'd burn after 20 minutes in the sun, an SPF 30 protects for about 10 hours. But intensity and wavelength distribution of UVB rays vary throughout the day and by location. And that calculation does not apply to UVA rays.

No sunscreen blocks 100 percent of UV rays, and ultrahigh SPFs are not much more protective than SPFs of 30 or 50. SPF 15 blocks 93 percent of UVB rays. SPF 30 blocks 97 percent. The increase in protection is even more gradual after that, 98 percent for SPF 50 and 99 percent for SPF 100.



## **Ratings: Sunscreens**

The sunscreens are listed in overall performance order within the types: lotions, sprays, and ultrahigh SPFs. All are water-resistant for 80 minutes, except where noted.

CR Best Buy 🗵 Recommended

Α.	A. LOTIONS										
REC.	RANK	PRODUCT	PRICE PER OUNCE	BOTTLE SIZE	PRICE	CLAIMED SPF	TESTED SPF	SCORE	UVA	UVB	
~	1	<b>Vichy</b> Capital Soleil 50 Lightweight Foaming Lotion (Foam)	\$5.94	4.8 oz.	\$28.50	50	Meets claim	99	0	•	
4	2	<b>Coppertone</b> Water Babies SPF 50	\$1.31	8.0 oz.	\$10.50	50	Meets claim	98	0	•	
~	3	<b>Equate</b> (Walmart) Ultra Protection SPF 50	\$0.56	16.0 oz.	\$9.00	50	Meets claim	94	0	•	
~	4	No-Ad Sport SPF 50 1	\$0.63	16.0 oz.	\$10.00	50	Meets claim	88	•	•	
~	5	Ocean Potion Protect & Nourish 30	\$1.00	8.0 oz.	\$8.00	30	Meets claim	87	0	●	
~	6	Aveeno Protect+ Hydrate SPF 30	\$3.33	3.0 oz.	\$10.00	30	Meets claim	84	•	●	
~	7	<b>Up &amp; Up</b> (Target) Ultra Sheer SPF 30	\$1.63	3.0 oz.	\$4.90	30	Meets claim	83	0	●	
	8	<b>Hawaiian Tropic</b> Sheer Touch Ultra Radiance SPF 50	\$1.13	8.0 oz.	\$9.00	50	28	70	0	0	
	9	<b>Alba</b> Botanica Very Emollient Sport SPF 45	\$2.88	4.0 oz.	\$11.50	45	Meets claim	67	0	•	
	10	<b>California Baby</b> Super Sensitive SPF 30+ 2	\$6.90	2.9 oz.	\$20.00	30+	Meets claim	44	0	0	
	11	Babyganics Mineral- Based SPF 50+	\$2.00	6.0 oz.	\$12.00	50+	25	44	0	0	
	12	<b>Well at Walgreens</b> Baby SPF 50 2	\$0.85	10.0 oz.	\$8.50	50	25	43	0	0	
	13	Vanicream SPF 50+ 2	\$4.50	4.0 oz.	\$18.00	50+	17	41	0	•	
	14	<b>Yes To</b> Cucumbers Natural SPF 30 <sup>2</sup>	\$4.00	3.0 oz.	\$12.00	30	14	35	•	e	
	15	Aloe Gator SPF 40+ (Gel)	\$3.25	4.0 oz.	\$13.00	40+	Meets claim	21	•	•	
В.	B. SPRAYS										
~	1	<b>Banana Boat</b> SunComfort Continuous Spray SPF 50+	\$1.83	6.0 oz.	\$11.00	50+	Meets claim	97	0	•	
4	2	<b>L'Oréal</b> Quick Dry Sheer Finish 50+	\$2.44	4.5 oz.	\$11.00	50+	Meets claim	94	0	•	
~	3	<b>Coppertone</b> Sport High Performance AccuSpray SPF 30 1	\$1.58	6.0 oz.	\$9.50	30	Meets claim	84	0	•	

Guide to the Ratings. Score is based on the results of our UVB and UVA tests after water immersion.



● Excellent ● Very Good ○ Good ● Fair ● Poor

В.	B. SPRAYS continued										
REC.	RANK	PRODUCT	PRICE PER OUNCE	BOTTLE SIZE	PRICE	CLAIMED SPF	TESTED SPF	SCORE	UVA	UVB	
V	4	<b>Equate</b> (Walmart) Sport Continuous Spray SPF 30 1	\$1.33	6.0 oz.	\$8.00	30	Meets claim	84	0	●	
	5	<b>Coppertone</b> ClearlySheer for Beach & Pool SPF 50+	\$2.20	5.0 oz.	\$11.00	50+	37	79	0	●	
	6	<b>CVS</b> Sport Clear Spray SPF 30 1	\$1.50	6.0 oz.	\$9.00	30	Meets claim	79	0	0	
	7	Hawaiian Tropic Island Sport Ultra Light SPF 30	\$1.75	6.0 oz.	\$10.50	30	Meets claim	74	0	0	
	8	Australian Gold Continuous Clear 30	\$1.75	6.0 oz.	\$10.50	30	Meets claim	69	0	0	
	9	Neutrogena Wet Skin SPF 30 1	\$1.90	5.0 oz.	\$9.50	30	Meets claim	68	0	0	
	10	<b>Banana Boat</b> Sport Performance CoolZone SPF 30	\$1.67	6.0 oz.	\$10.00	30	Meets claim	67	0	0	
	11	<b>Banana Boat</b> Sport Performance Clear UltraMist with Powerstay Technology SPF 50+	\$1.83	6.0 oz.	\$11.00	50+	24	59	0	0	
	12	Goddess Garden Organics Sunny Body Natural 30 23	\$3.67	6.0 oz.	\$22.00	30	Meets claim	40	e	0	
	13	EltaMD UV Aero SPF 45	\$4.67	6.0 oz.	\$28.00	45	22	26	•	0	
C. ULTRAHIGH SPFs											

#### La Roche-Posav Meets ~ 1 Anthelios 60 Melt-in \$7.20 5.0 oz. \$36.00 60 100 claim Sunscreen Milk (Lotion) Coppertone UltraGuard V 2 \$1.38 70+ 90 8.0 oz. \$11.00 59 SPF 70+ (Lotion) 1 Neutrogena Beach Meets ~ 70 88 3 Defense Water+Sun Protection SPF 70 (Spray) \$1.62 6507 \$10.50 claim **Caribbean Breeze** Meets ~ 70 4 \$2.75 60.07 \$16 50 84 Continuous Tropical 0 claim Mist SPF 70 (Spray) Banana Boat Sport Performance with Powerstay Technology 5 \$1.75 6.0 oz. \$10.50 100 36 78 SPF 100 (Spray) CVS Baby Pure & Gentle 6 \$3.33 3.0 oz. \$10.00 60 18 44 SPF 60 (Lotion) 123

© Contains retinol or retinyl palmitate, which pregnant women may want to avoid. © Contains only the mineral active ingredients titanium dioxide, zinc oxide, or both. © Water resistant for 40 minutes.

# BEST 'NATURAL' SUNSCREEN • A10 California Baby \$20

It didn't get high enough UVA or UVB scores in our tests to make it onto our recommended list, but it was the only mineral sunscreen that got a Good rating for UVA and UVB protection. Titanium dioxide is the active ingredient.

#### BEST SPRAY

- B1 Banana Boat \$11
- B3 Coppertone \$9.50

Banana Boat has a narrow spray pattern that makes it easier to target specific places such as arms and legs without getting it on clothing or dispersing it into the air. Coppertone, with its wider spray pattern, is better for large areas, such as the back.

#### **TRULY FRAGRANCE-FREE**

• **C2 Coppertone** \$11 CR Best Buy The only sunscreen in our tests that had a barely noticeable aroma, it provided excellent UVA and UVB protection despite averaging an SPF of 59, not the claimed 70+.

#### IF PRICE IS NO OBJECT

C1 La Roche-Posay \$36

#### • A1 Vichy \$28.50

Scoring 100 and 99, respectively, these pricey products *do* deliver. The Vichy is a lightly scented sunscreen with an unusual texture similar to hair mousse.

#### **HOW WE TEST SUNSCREENS**

To check for UVB protection, a standard amount of each sunscreen is applied to small areas of our panelists' backs. Then they soak in a tub of water. Afterward, each of those areas is exposed to six intensities of UVB light from a sun simulator for a set time. About a day later, the six spots are examined for redness. The resulting UVB ratings reflect each product's actual effectiveness after water immersion. (The tested sunscreens carry a claim of water resistance for 40 or 80 minutes.) Tested SPF (based on the average results for each sunscreen). not how close a sunscreen comes to meeting its SPF claim, is used to calculate our UVB scores. To test for UVA, we smear sunscreen on a plastic plate and pass UV light through and measure the amount of UVA and UVB rays that are absorbed. That information is then used to calculate our UVA score.