

Sunscreening your way to Outdoor Summer Fun



Not too long ago, Summertime was all about the **Tan.**

by Elaine Staats

When I was 17, I spent a long hot day swimming at a friend's new pool. I knew the first day of school would be spent comparing how dark my arms and legs had gotten over the summer.

Since my natural coloring is the same shade as snow, I had to work harder than most to get a tan. On this particular day, I kept looking at my tan lines in amazement at how dark I was getting. It wasn't until many hours later, when I went inside, that I discovered I wasn't brown. I was red, really red. My new bikini had exposed body parts that hadn't seen much sun and I ended up with second degree burns across my chest. Twenty years later, I had skin cancer. Today I only have a faint cleavage scar to remind me of my ignorance. Having worked in a dermatology office, I recognized the danger signs and was able to catch the cancer in time. In those early

teenage years, while I was basting in the sun, my dad would tell me "get out of the sun. You're going to look like you're 90 when you're 40." I recall thinking that when I'm 40 I may as well be dead. Well, I'm 40 now and I think that my life still has value! How naïve I was to think that there would be no consequences of sunbathing. Dad was well ahead of the curve. We didn't know nearly as much then as we do now. At the time, sunscreens weren't even rated with an SPF. Yet today, scores of people continue to actively pursue a tan. A tan does look nice and makes the person look healthy. But looks can be and often are deceiving.

Let's talk Ultra Violet

We've all heard of UVA and UVB rays. But what does that really mean? An easy way to remember is UVA rays are the Aging rays, and UVB rays are the Burning rays. UVA rays are a long wave solar ray of 320-400 nanometers (billionths of a meter). UVA rays

penetrate deeper into the skin and are considered the primary cause of wrinkling and photo aging. Although these rays are less likely to cause a sunburn, UVA rays exacerbate the UVB rays carcinogenic effects, and may directly induce skin cancers. The more exposure you have to UVA rays, the more damage UVB rays cause.

UVB rays are short wave solar rays of 290-320 nanometers. The rays are considered the main cause of basal and squamous cell carcinomas, and a significant cause of melanoma, the most dangerous form of skin cancer. They are also responsible for turning the skin red.

But I wear Sunscreen!!!

The best ad I've ever hear for sunscreen was "use everyday, see results in 20 years". Sunscreen is a fabulous thing, but you need to be educated with regards to it so you don't have a false sense of security. First, let's examine the SPF. SPF means sun protection factor. It is a universal

measurement of UVB protection. Currently no comparable standard exists for UVA protection. When applied adequately, an SPF 15 blocks 93% of UVB rays. SPF 30 and above block 97% of UVB rays. The SPF measures the length of time the product protects the skin from reddening compared to how long it takes to redden without protection. For example, if it takes 10 minutes for the skin to burn, an SPF 15 theoretically prevents burning 15 times longer, or 2 1/2 hours. Remember, the SPF rating only applies to UVB rays. If you want protection from UVA rays, you need to use a "broad spectrum" sunscreen. Broad spectrum sunscreen will contain one or more of the following ingredients: Zinc oxide, Titanium dioxide or Parsol 1789 (also known as avobenzone)

The first two can leave you with a whitish film on the skin. Micronization of these ingredients has helped reduce the whiteness. There is some question as to the efficacy of the ingredients if they are micronized too much. For those that don't like the Kabuki look, parsol is an excellent alternative. My particular favorite is by Jan Marini Skin Research. It is a broad spectrum antioxidant waterproof SPF 30 that protects to 400 nanometers. Hence, you filter out as much UVA and UVB rays as possible. If you have more than incidental sun exposure (driving, walking to the car) it is recommended that you reapply your sunscreen every two hours. UV rays penetrate windows and car windshields. The ingredient DHA (dihydroxyacetone) is a colorless sugar that interacts with dead surface cells staining the skin darker. As the cells slough off, the "tan"



gradually fades. Since it doesn't turn that awful orange color it used to many years ago, more people are using fake tans as an alternative. These artificial tanning products do not provide UV protection. Most people use 1/2 to 1 as much sunscreen as needed. It's been said anywhere from a full teaspoon to a shot glass is the correct amount. If you use too much, you are only wasting product. If you don't use enough, you are damaging your skin. Sun exposure begins causing damage in as little as 2 minutes.

Portable Protection

In addition to using the right sunscreen and reapplying often, there are other methods that can be employed to give you added protection. Using a topical vitamin C under sunscreen can boost the efficacy of your sunscreen. Sunglasses with UV protection can help prevent cataracts by shielding the eyes. Wearing a hat during outdoor

activities will provide a physical barrier. Windows and windshields can be treated with a special UV protecting film. Loose fitting clothing with a tight weave in dark colors helps block out the sun. Long sleeves, gloves and shade umbrellas are also helpful. It is possible to burn through your clothing. There is even a new laundry treatment product which promises to wash in an SPF 30 into your clothes. The sun should be avoided if possible between 10 am and 3 pm. Snow and ice leave the face and eyes almost twice at risk of UV damage because of reflective glare. Remember to protect you skin in all seasons.

What if I burn anyway?

We've all been there. You start an activity innocently enough, and end up outside longer than you thought. You get lost on a walk, hook into a big fish offshore, or go out to check the mail and end up talking to a neighbor for an hour. There are also medications that increase skin sensitivity and will cause you to burn more readily:

Tetracycline, Retin-A and Accutane. These three are commonly used to treat acne.

Griseofulvin, for fungal infections.

Cipro, an antibiotic

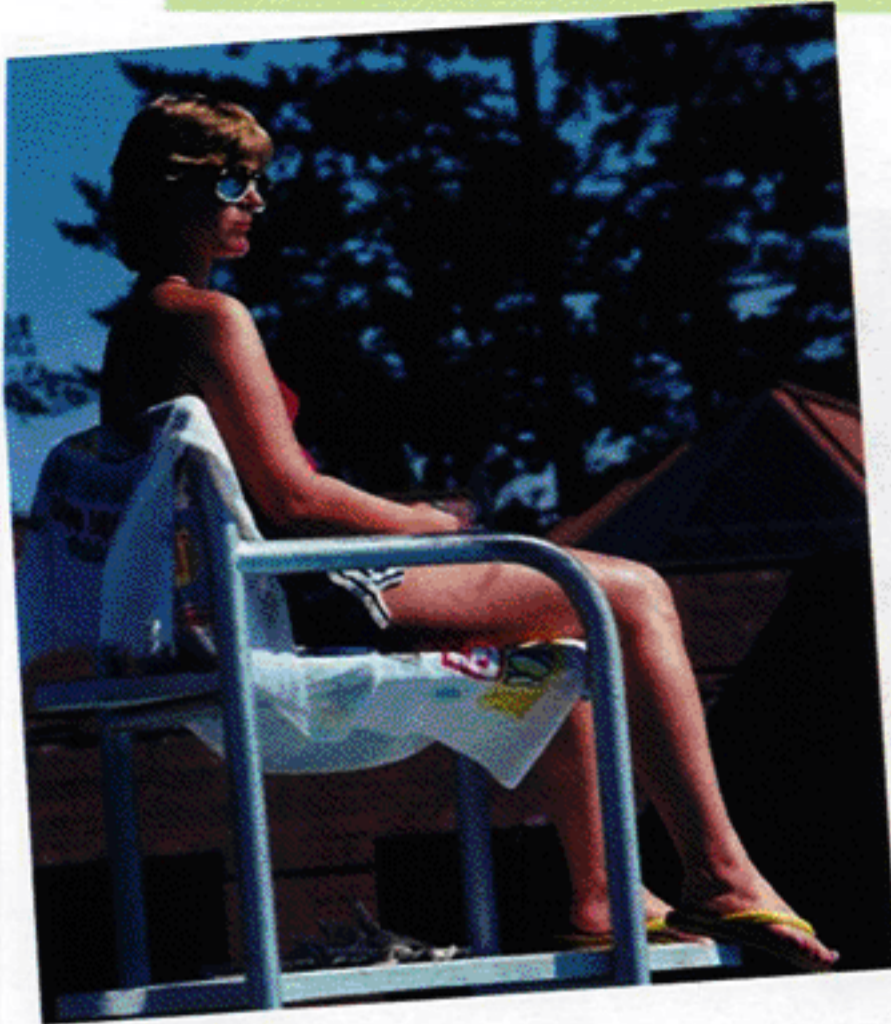
Sulfa, common treatment for bladder infections.

Lariam, travelers take this to prevent malaria.

Thiazides, used to treat high blood pressure.

St. John's Wort, herbal drug may increase sun sensitivity

High estrogen birth control pills



Sunburns can range from mild to extreme, and need to be treated according to their severity. Aside from the obvious redness, other mild to moderate sunburn symptoms may include: chills, fever, nausea or vomiting, flu-like symptoms, blistering, skin loss (peeling) 4-7 days after exposure.

When the skin begins to peel and flake, allow it to do so naturally. Picking and peeling the skin off will cause the new skin underneath to freckle.)

These symptoms can be treated with anti-inflammatory medications such as aspirin, ibuprofen and naproxen.

Cool compresses with equal parts milk and water may help. Aloe Vera

lotions and gels provide relief, as do cool, not cold baths in plain water. Silver sulfadiazine (1% cream, Thermazene) can also be used to treat a sunburn.

Extreme Sunburns may require

medical attention. These symptoms may include: severe pain, severe blistering, headache, confusion, nausea or vomiting and fainting.

In addition to this, other skin problems like herpes simplex or lupus may worsen. Severe sunburns may be treated with oral steroid therapy.

Skin Cancer

This is not a pleasant subject, but it needs to be addressed. According to the American Cancer Society's 2004 Facts and Figures, more than 1 million new cases of skin cancer will be diagnosed in the US this year. It is estimated 10,250 people will die from skin cancer this year. 2004 will have about a 4% increase in cases of melanoma than in 2003. Older Caucasian males have the highest mortality rate for melanoma, and the rate for all Caucasians has more than tripled between 1980-2003.

Anyone can get skin cancer, but the fair skinned, light hair and light eyed people are at a higher risk. Early detection accounts for the high cure rate in skin cancer. A periodic head to toe skin check with a dermatologist is a good idea. Knowing what to look for on yourself (and others) can save a life. I detected a suspicious mole on myself which was cancerous. That made me more aware of strange looking moles on others. When I noticed an irregularly shaped dark spot on my mom's knee, I blurted out, "Mom, you've got skin cancer." Although I'm not qualified to

diagnose such things, I was right. Fortunately, we both received treatment in a timely manner and the cancer did not spread.

It is estimated that anywhere from 50-80% of your lifetime sun exposure occurs before age 20. Many years after our days in the sun, we can experience the ramifications. When it comes to early warning signs about skin cancer, know your ABCD's.

- A** Asymmetry - Normal moles are typically round and symmetrical
- B** Border Skin cancers may have uneven borders
- C** Color; watch for shades of brown, tan, black red, white or blue
- D** Diameter; if a spot is larger than a pencil eraser, have it checked by a doctor right away.

Types of Skin Cancer

Basal Cell Carcinoma is the most common form of skin cancer, affecting 800,000 Americans each year. Some warning signs may include:

Open sore that bleeds, oozes, crusts or remains open more than three weeks. It is a persistent, non healing sore.

Reddish patch or irritated area, which can itch or hurt, or have no noticeable discomfort.

Shiny bump that is pearly or translucent, or can be tan, black or brown.

A pink growth which is indented and crusted in the center and has a slightly elevated border.

A scar like area that is white, yellow or waxy with poorly defined borders. The skin in this area looks shiny and taut.

Squamos Cell Carcinoma is the second most common skin cancer affecting 200,000 Americans annually. These warning signs are:

Wart like growth which crusts and bleeds occasionally

Persistent scaly red patch with irregular borders

An open sore which bleeds and crusts more than two weeks

Elevated growth with central depression, bleeding occasionally, and may increase in size rapidly.

Melanoma is the most serious form of skin cancer. 51,000 cases are reported to the American Cancer Society each year. Melanoma that becomes malignant is usually small brown or black, or larger multi colored patches with an irregular outline. They can crust on the surface or bleed. They can also arise from pre-existing moles.

Aging

Let's face it, the reality of sun damage gets our attention when we look in the mirror. No one wants to look older than they are. At least no one I know. Excess unprotected sun exposure makes us appear to age more rapidly. Sunlight triggers free radical damage which breaks down collagen. We wrinkle, and the skin loses its elasticity, causing it to sag. The skin can also take on a leathery, freckled blotchy look. I tell these stories to my 17-20 something year old clients, and they look at me like I'm insane. They react much in the same manner I reacted to my father when he told me what the sun would do to me. There are a lot of effective treatments and products available to help reverse some of the sun damage, but it is better to avoid it if possible. We can't go back and undo

what has been done, but we can keep the damage from continuing to progress. I'm not advocating we all hide indoors and live like hermits, but we should never walk out the front door without sunscreen on at least our faces. Here in the Bay Area we experience nearly year round sun. Get out on those beautiful days and enjoy it. That is part of the appeal of living here. Just remember to be smart about it.

Elaine Staats is a licensed Esthetician and Electrologist. She owns Image Enrichment Group in Cupertino, where she and her staff provide skin care services, electrolysis, microdermabrasion, and airbrush UV-free tanning. She can be reached at 408-996-8969 or at www.ieg.net.