"Protection From UV Rays" by Richard O'Brien

May has arrived and it's not too early to start thinking about protecting ourselves from the sun's damaging rays. Actually, from what the American Academy of Dermatology experts say, we should be applying sunscreen of at least SPF 30 or higher that provides broad spectrum UV protection and water resistance to our exposed body parts yearround. For women, this isn't quite as difficult since many creams and lotions have at least a low level SPF.

What is this SPF rating stuff? Well that's a very good question. We see those three letters on everything from sunscreen and lip balm to clothing, but what does it really mean? Read on to find out more than you probably ever imagined about sunscreens and SPF.

SPF is an acronym for Sun Protection Factor. This may sound complicated but it's actually very simple. The SPF represents the ratio of ultraviolet radiation (specifically UV-B) that will cause sunburn on untreated skin versus the amount that will cause sunburn on treated skin. We get sunburned by the ultraviolet radiation, so the higher the SPF the greater the protection the item (sunscreen, clothing, etc.) provides.

For example an SPF 15 sunscreen blocks 93% of UVB radiation, and SPF 30 blocks 97%. After that, the difference in protection is small. **SPF 50 blocks 98%, and SPF 100 stops 99% of UVB rays from reaching your skin**

Many of us think the SPF rating is related to the amount of time you can spend in the sun without burning. For example, if you normally burn in one hour on the beach then you could apply a sunscreen with SPF of 25 and remain in the sun for an entire day, right? No. This is untrue because many factors like the amount of product applied and how often it is re-applied; time of day, your skin type and other considerations affect how the sun's rays affect our skin.

Did you know that there are actually two types of ultraviolet rays causing skin damage? Most commercial sunscreens focus on only UV-B rays. However, it is the UV-A rays that can cause immune system suppression leading to malignant melanomas and deep tissue damage responsible for wrinkles and age spots. When you go to buy sunscreen, be sure the product you select is labeled as protecting for UV-A and U-VB. Remember the importance of each, UV-A helps prevent aging and UV-B helps prevents burning.

Take a few seconds, go the extra step and read the label for specific ingredients, because not all broad spectrum (UV-A/UV-B) products are created equal. Look for Avobenzone, Ecamsule and Zinc Oxide for the best protection from harmful ultraviolet rays. Titanium oxide is also an ingredient which provides good protection but doesn't cover quite as much of the spectrum of damaging ultraviolet rays. One important fact many people overlook is that little sticker on the medicine bottle that indicates the medicine can cause sun sensitivity. This means that the drugs will cause your skin to be more affected by the sun than it normally would, i.e. you might burn more quickly than usual. There are many medications that cause sun sensitivity, check your medicine bottles. If the sticker is there, be safe and avoid the sun until you have finished the medication. As always, if you have any questions consult your health care professional.

Another area of sun protection involves your eyes. When purchasing sunglasses, only buy those that have a label stating UV400. Any sunglasses stating 100% UV protection generally refers to the UVB spectrum. Completely ignoring the damaging UVA rays from the sun. What makes matters worse, these subpar sunglasses do additional damage by making things darker for your eyes. This causes your pupils to dilate (widen) allowing more of the damaging UVA rays to enter your eye. This is not good at all! The same goes for your indoor glasses. Make sure your lenses have a UV400 coating or purchase a lens material that naturally blocks the UV rays. Tinting eyeglass lenses is not enough, always get the best UV ray protection for your eyes. Your eyes are not replaceable.

Sunscreen Quiz: (answers per the American Academy of Dermatology)

When, in relation to the time you're going into the sun, should you apply sunscreen? Ideally, apply sunscreen 15 minutes to a half-hour before going outside.

How much sunscreen should you apply at a time? One ounce, approximately one shot glass of sunscreen, is the amount you should use each time you apply.

Do you know how often you should reapply sunscreen? Every 2 hours, more often if you're active or swimming, even on cloudy days.

Is SPF 50 sunscreen twice as protective as SPF 25 sunscreen? No, protection does not increase proportionately with SPF.

Can you tan safely? No, the tanning effect is the skin's response to injury.

When are the sun's rays the strongest? Between 10 a.m. and 4 p.m.

Can you get burned on a cloudy day? Absolutely, always wear protective sunscreen.

That is all for this month. Please visit us next month when I write about Choosing The Correct Eyewear (Tips on UV protection, various lens coatings, transitional lenses, are they worth it? Multifocal lenses vs Bifocals/Trifocals and more.