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Chronic long-term sun exposure, including sun tanning, indoor tanning and sunburns, contributes to the development of skin cancer, precancerous skin lesions (Actinic Keratoses), premature skin aging, wrinkling, brown spots and cataracts of the eyes. Sunburn has been linked to the subsequent development of melanoma, the most serious and potentially deadly form of skin cancer. Here are some suggestions to minimize damage from the sun:

SUNLIGHT:

- Natural sunlight emits ultraviolet A (UVA) and ultraviolet B (UVB) radiation.
- UVA rays cause tanning and are primarily responsible for photoaging including wrinkling, brown spots and more. UVA light intensity is the same throughout the day, all year round and can even penetrate through window glass.
- UVB rays cause sunburn and are primarily responsible for skin cancer. UVB intensity is greatest between the hours of 10 a.m. and 4 p.m. and during the summer months. There is some overlap between UVA and UVB in causing photoaging and skin cancer.
- It is true that sunlight is necessary to maintain good physical and mental health, but exposure in moderation and with appropriate protection is important.
- The sun helps the skin to produce vitamin D, which the body otherwise does not naturally produce. However, only 20 minutes of sunlight three times weekly is necessary to fulfill that requirement. Additionally, many foods are now fortified with calcium and vitamin D.

CHOOSING A SUNBLOCK:

- Choose a broad-spectrum sunblock (one that protects against UVA and UVB) with a SPF (Sun Protection Factor) of at least 15.
- The SPF refers to the ability of a sunblock to prevent sunburning due to UVB exposure; it says nothing about that product's ability to prevent suntanning from UVA exposure. To date, there is no rating system for UVA exposure protection. There is no product that can completely prevent suntanning.
- A product with a SPF 30 does not give twice the protection of a SPF 15. SPF 15 absorbs 93% of the sunburning rays, and SPF 30 has a 95% absorption. However, both products could be equal in their ability to retard tanning depending upon their ingredients.
- The primary UVA absorbers are the Benzophenones, Anthranilates, and Avobenzone (Parsol 1789, Helioplex, and Mexoryl).
- The primary UVB absorbers are PABA derivatives, Salicylates and Cinnamates.
- Titanium Dioxide and Zinc Oxide protect against both UVA and UVB light.
- The ingredient of a sunblock may be more important than the SPF number. For example, a product with a SPF 45 will be excellent in preventing sunburn (UVB) but will likely be ineffective in preventing photoaging (UVA) unless it had the appropriate UVA blocking agents. Likewise, a product with a SPF 15 may be adequate to prevent sunburning (UVB) but could be very good in preventing photoaging if it had the appropriate UVA blocking agent.
- Most quality sunblocks combine multiple ingredients to yield a product with excellent photoprotection against both UVA and UVB exposure. We recommend a SPF of 30 or higher which also contain an effective UVA block such as Avobenzone, titanium dioxide and/or zinc oxide.

OVER

- Products containing titanium and zinc are more difficult to apply because of their thicker consistency, but are generally thought to be more protective than other products. A useful hint in using these products is to apply a small pea-sized amount to multiple different areas and rub it in well, as opposed to applying a large quantity in a single area which will be much more difficult to spread.
- Apply sunblock at least 30-minutes before sun exposure to face and all uncovered skin including ears, neck and backs of hands. Reapply sunblock every two hours, even on cloudy days.
- Use a waterproof sunblock when you swim or expect to be sweating and reapply afterwards.
- If you have dry skin, use a cream-based sunblock.
- If you have oily and/or acne prone skin, use a gel based on a noncomedogenic sunblock. If you become irritated or allergic to sunblock chemicals, you might try using sunblocks which are labeled “chemical free”, “sensitive skin” or for babies. Plain white zinc oxide ointment is an excellent sunblock but is quite messy to use.
- Protect your lips with either a lip balm containing a broad-spectrum sunblock and/or lipstick.

SUN PROTECTION TIPS:

- Try to avoid the sun between 10 a.m. and 4 p.m. when the sun’s rays are the strongest.
- Stay in the shade whenever possible and keep infants under six months of age out of the sun.
- Wear protective clothing: A long-sleeved shirt, pants, wide-brimmed hat and sunglasses which block UV light. You might inquire about specially woven UV rated clothing.
- Apply sunblock to face, ears, neck and hands when near window glass such as driving or sitting by a window, as UVA light passes through window glass causing photoaging and skin cancer.
- Take special precautions when the National Weather Services daily ultraviolet (UV) radiation index predicts UV exposure levels of moderate and above (5-10+) or when near surfaces that reflect the sun's rays such as water, snow and sand. Whenever possible, stay inside or in the shade.

INDOOR TANNING--POTENTIAL HEALTH RISK:

- Tanning with a sunlamp is not safer than sunlight. There is no such thing as a healthy tan. A tan is a sign of injury: The skin's response to an overdose of ultraviolet radiation.
- Indoor tanning beds give only a small amount of burning rays - ultraviolet B (UVB) light - but provide an intense dose of ultraviolet A (UVA) that is 2-3 times as strong as outdoor light.
- UVA light penetrates more deeply into the skin than UVB, damaging the skin's elasticity.
- Thirty minutes of an indoor tanning bed is equal to a day at the beach for UVA exposure.
- Some medications that you may be applying to your skin or taking internally may make you extra sensitive to ultraviolet light and cause you to develop a severe burn.
- Indoor tanning, which is primarily UVA light, can cause photoaging including wrinkles, age spots and even skin cancers.
- The most rapidly increasing incidence of skin cancer is in young women who have been indoor tanning.
- UVA rays have suspected links to immune system damage and to potentially deadly melanoma skin cancer.
- If you would like to have a tan, use one of the self-tanning creams, sprays or lotions.
- THE AMERICAN ACADEMY OF DERMATOLOGY, AMERICAN MEDICAL ASSOCIATION, CENTERS FOR DISEASE CONTROL AND PREVENTION, AND THE FOOD AND DRUG ADMINISTRATION DISCOURAGE THE COSMETIC USE OF TANNING BEDS AND SUNLAMPS.

Rev. 3/07