



Safe Sun Tips

Premature Aging of Skin

Repeated exposure to the sun damages elastin fibers in the skin and accelerates the aging process. Skin loses elasticity, starts to sag and wrinkle, and becomes leathery. The damage is irreversible, with signs beginning to show in the early 20s on fair-skinned individuals. Once even a small amount of damage has occurred, repeated exposure to the sun increases the effect. Besides leathery, wrinkled skin, other signs of damage are brown patches or spots, or skin with a yellow or grayish hue.

The Person

As the amount of melanin in skin increases, so does the natural protection from sunburn. Individuals with dark complexions, especially those with olive, brown, or black skin, can remain in the sun for longer periods before burning occurs. Blondes, redheads, and individuals with fair skin burn readily. In some instances, these people never tan because of the absence or very low levels of melanin in the skin. Therefore, individuals must consider their skin type when selecting sun protection products and planning time in the sun.

Babies under six months of age should be kept out of direct sunlight at all times. Sunscreens should not be used on infants under six months of age. Use hats, clothing, and shading to protect small babies from the sun.

Location and Atmospheric Conditions

The number of ultraviolet rays that reach the skin affect the speed and intensity of tanning or burning. When the atmosphere is thick, fewer ultraviolet rays pass through or reach the skin. At the equator and at higher altitudes, such as the mountains, possible radiation from the sun is greatest because of a clearer and less dense atmosphere to filter out ultraviolet rays. As one moves away from the equator or toward sea level, burning is less intense due to thicker atmospheric conditions. The number of ultraviolet rays at the equator is four times greater than those in Alaska or the southern tip of South America. Also, the southern United States receives one to one and a half times the number of ultraviolet rays as the north.

People who enjoy the sun know that severe burns are likely on hazy, overcast, cloudy-bright days. This effect is called sky radiation. The UVB rays, especially, scatter throughout molecules in the atmosphere and cause burning. Because sunlight seems less intense, less bright, and less warm, individuals normally take fewer precautions and thereby increase the potential for a bad sunburn.



Be aware that tanning and burning can occur on hazy days when the sun does not appear to be shining brightly.

Have respect for ultraviolet rays from the sun. They not only create problems on hazy days but also can burn the skin through clothing or while sitting in areas shaded from direct sunlight. Ultraviolet rays bounce off bright surfaces, such as snow, pavement or sand. One can be burned while sitting under a beach umbrella. Sky radiation on hazy days can hit the skin at angles and burn individuals not in direct sunlight.

Ultraviolet rays pass through some fabrics such as open-weave fabrics, lightweight knits, and nylon stockings. T-shirts worn while swimming reduce burning but still allow ultraviolet rays to pass through. Ultraviolet rays penetrate water but lose half their intensity. Nevertheless, burning can occur on parts of the body submerged in the water.

Most car, home, and office windows block UVB rays but may allow some UVA rays to pass through increasing UV exposure. Tinted windows help block more UVA rays, but that depends on the type of tinting. Although window exposure probably does not pose a great risk most people should avoid extended periods of time close to a window with direct sunlight.

Seasonal Conditions

The amount of ultraviolet radiation available changes with the seasons. In the North Temperate Zone, the maximum radiation possible occurs on June 21. During each season UV rays can cause skin damage depending on length of exposure and skin type.

Be especially careful at midday during warm weather months. Ultraviolet rays are most intense between 10:00 a.m. and 4:00 p.m. The American Academy of Dermatology recommends you wear sunscreen every day if you are going to be in the sun for more than 20 minutes. Plan activities before 8:00 a.m. and after 6:00 p.m. to minimize your exposure to UV rays.

Prevention of Sunburn Damage: Know Which Products Protect

To prevent sun damage to your skin you need to avoid overexposure to ultraviolet light. Using sunscreen and following some recommended practices will help. Do select products that provide protection. Let's review the various types of sun care products and evaluate those that contain ingredients to filter out ultraviolet rays (UV radiation) and limit the quantity of rays that can be absorbed by the skin. Some products offer this protection; others do not.



Sun Screens

Sun screens contain one or more protective chemicals that absorb and scatter ultraviolet rays. These have a numerical rating system to indicate the specific amount of protection. The numbers, known as Sun Protection Factors (SPF), are listed on the product label. The next section will discuss these in detail.

The higher the SPF number, the greater the protection. Although no sunscreen blocks UV radiation 100 percent. Sun screens are available in many forms including lotions, creams, gels, sprays, ointments and wax sticks. Besides sun screens use a lip balm with SPF of 15 or higher to protect your lips from sunburn.

Sun screens should be applied 20 to 30 minutes before going out into the sun to allow time for the sun screen to start working. Apply liberally and reapply every 2 hours to provide maximum effectiveness. Do not use sunscreens to increase the time spent in intense sunlight or in place of protective clothing.

Lubricants

Suntan preparations often contain a lubricant that reduces the drying effect of the sun on skin. However, suntan lotions, oils, gels, and other moisturizers without extra protection (sun screen), or home preparations, such as mineral oil or baby oil and iodine, only benefit as a lubricant and do not provide protection from the sun's rays.

Screen Selection: Use the SPF Rating

Select a sun screen or sun block product according to the SPF rating to achieve optimum protection for your needs. SPF is a numerical rating system to indicate the degree of protection provided by a sun care product. Sunscreen does not give you total protection. When applying sunscreen of SPF correctly your skin gets the equivalent of 1 minute of UVB rays for each 15 minutes you spend in the sun. Thus, 2 hours in the sun wearing SPF 15 sunscreen is the same as spending 8 minutes unprotected. SPF of 15 or greater is recommended to be used year-round by all skin types with those of very fair or fair complexion using an SPF of 30 or more.

Water Proof and Application

Sun protection is lost through heat, humidity, perspiration, and rubbing off. Reapply sunscreen to continue protective benefits. For added protection when exposed to water, as when swimming or water skiing, look for water proof products. Look for labels that read water proof or water resistant. Follow label directions since protection time varies, water proof typically provides protection for at least 80 minutes when swimming or sweating. Whereas, water resistant usually only provide protection for 40 minutes. People should reapply after swimming or perspiring heavily.



Clothing for Sun Protection

Covering up when in the sun is one approach to ultraviolet ray protection. Wearing a long-sleeved shirt and long pants or long skirts will provide optimum protection. Generally, fabrics with a tighter, denser weave, in dark colors, layered, and a matte or dull finish, give the best protection. Unfortunately, these fabrics tend to be hot and less comfortable to wear. Knit constructions, such as cotton t-shirts, give relatively poor protection (SPF rating of 4.8) since UV rays pass through loops on the knit structure.

Several companies are marketing sunlight or UV resistant fabric. These fabrics usually have a tighter weave or knit and are usually darker in color. Many sun-protective fabrics have a label listing the Ultraviolet Protection Factor (UPF) value, which is the level of protection the clothing garment will provide from the sun's UV rays (on a scale from 15 to 50+). The higher the UPF, the more protections from UV rays.

Three categories of UPF protection include:

15 to 24 provides "Good UV Protection"

25 to 39 provides "Very Good UV Protection"

40 to 50 provides "Excellent UV Protection"

A garment labeled "sun-protective" or "UV-protective" has to have at least a UPF of 15. Garments can lose their sun-protective effectiveness if they are too tight or stretched out, damp or wet, and worn and washed frequently.