



Skin care during the summer months

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Sunlight can induce a feeling of well-being and is needed for the formation of vitamin D. However, sunlight can also have negative effects on the skin, the most serious of which is skin cancer.

Sunburn may occur when the skin is exposed to ultraviolet radiation (UVR), most often after being in the sun for too long. Although most cases of sunburn are not severe, a lifetime of sun exposure and/or frequent sunburn increases the risk of developing skin cancer, wrinkles and other cosmetic skin concerns such as an uneven skin tone, freckles and sun (age) spots. Sunburn and ultraviolet radiation can also increase the risk of developing cataracts (when the lens in the eye becomes cloudy).

Symptoms of sunburn

Unlike other burns, sunburn may not be noticed immediately because redness only starts to develop three to five hours after being out in the sun. Common symptoms of sunburn include reddened skin that is hot to the touch, skin pain and increased sensitivity of the skin to pressure and heat. More severe sunburn can cause skin swelling and blistering, fever and chills. Sunburn damage also triggers tanning of the skin, which is the body's response to UVR-induced damage of the skin cells.

Several days after a sunburn, people may notice peeling in the sunburnt area, often accompanied by itching. These peeled areas are even more sensitive to sunburn for several weeks.

Sunburn causes and risk factors

Normally, the skin is protected from the sun by a pigment in the skin called melanin. When the skin is exposed to excessive

UVR from the sun (or from a tanning bed), it becomes burnt. The amount of UVR required to burn the skin depends on:

- The amount of melanin in the skin – In general, people with fair skin and light-coloured hair have less melanin and are at higher risk of sunburn when compared to people with darker coloured skin.
- Geographical location – People in regions that are closer to the equator or at high altitudes (e.g. mountainous areas) are at higher risk of being sunburnt. Snow and light-coloured sand reflect UVR, while windy conditions mask the heat of the sun, making such-exposed people more at risk of sunburn.
- Medicine use – Some medicines may increase the sensitivity of the skin to the sun, e.g. tetracycline antibiotics.

Treating sunburn

Treatments for sunburn can help to relieve skin discomfort. Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen can help to relieve symptoms of pain and inflammation. The NSAIDs appear to work best if taken within 24 hours of the sunburn.

For mild sunburn, there are several topical products that are promoted to relieve pain, including cool compresses, aloe-based lotions and lotions or sprays that contain a local anaesthetic. Although studies have not proven that these products are helpful, they are unlikely to be harmful and may therefore be recommended. It is important to note that using these products does not reduce the long-term risks of sunburn e.g. skin cancer.

Preventing sunburn

There are various ways to prevent sunburn, including staying out of the sun during peak hours (10 am to 4 pm), using a sunscreen and wearing protective clothing.

The ultraviolet (UV) Index

- The UV index was developed to predict the risk of sunburn in an area on a given day, based on the weather conditions.
- It gives a number between zero and 11+ where zero indicates a low risk of sun exposure, 10 indicates a very high risk of exposure and 11+ indicates an extreme risk of sun exposure.

Using sunscreens

Sunscreens protect the skin by absorbing or reflecting ultraviolet radiation. The Sun Protection Factor (SPF) is an indicator of how much protection the sunscreen offers against ultraviolet B (UVB; sunburn) rays.*

In general, it is recommended to use a sunscreen with an SPF of 30 or more on exposed skin and to select a 'broad-spectrum' sunscreen that protects against both UVA and UVB radiation.

- People with fair skins, those out in the sun for a prolonged period during the day and those anticipating intense sun exposure e.g. while at the beach, should select a sunscreen with a higher SPF.
- Protect the lips with a lip balm with an SPF of 30 or higher and re-apply frequently.
- Some cosmetic products and moisturisers contain sun-protective agents. However, to be effective, these products should have an SPF of 15 or higher. Many of these products, however, do not provide UVA protection.
- Sunscreens have not been adequately tested in infants younger than six months of age. Instead, parents are encouraged to use protective clothing, hats, sunglasses and shade to protect children from the sun. If a sunscreen is required, sensitive skin or 'baby' products are recommended.

*Before 1990 it was thought that only UVB was carcinogenic and that UVA radiation was safer (hence its use in tanning salons). However, more recent studies show that UVA radiation can have a negative impact on the skin and that it is also potentially carcinogenic.

Getting the most sun protection from the sunscreen

- Apply the sunscreen generously to all exposed skin 15 to 30 minutes before exposure.
- About two tablespoons of lotion should be enough to cover an adult's arms, legs, neck and face; additional sunscreen will be needed to cover the chest and back. Applying less sunscreen than recommended may reduce the sunscreen's SPF rating.
- Re-apply sunscreen after sweating, swimming, rubbing the skin, drying off with a towel.
- Re-apply sunscreen every two to three hours.

A word on sunless tanning

Several sunless tanning products are available, including lotions, gels and sprays. These products stain the skin, making it darker. The staining is temporary, usually lasts less than a week unless the product is reapplied. These products are generally safe, but it is important to note that the 'tan' provided by the sunless tanning product does not provide any protection against sunburn.

References

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