

THE TRUTH ABOUT SUNSCREENS

Are sunscreens really necessary?

Ask any dermatologist if a sunscreen is necessary; the answer would most probably be a definite "yes". Sunscreens are essentially helpful if you want to reduce sun-damage and premature ageing of the skin, which includes pigmentation and wrinkling, and in the worst-case scenario, certain skin cancers.

Sunlight, says Dr Wong Su-Ni, Consultant Dermatologist, Pacific Specialist Practice, comprises

ultraviolet-A (UVA), ultraviolet-B (UVB) and visible light. UVB is responsible for sun-burns and is a potent inducer of certain skin cancers (basal cell carcinoma and squamous cell carcinoma). Fortunately, UVB cannot pass through glass windows. UVA causes darkening of the skin, and can also induce skin cancer formation, such as melanomas. UVA is thought to be responsible for pigmentary changes, so common in the Asian skin, in the

long run. Unfortunately, UVA is able to penetrate window glass so be wary of sitting near bright windows! Sunscreens are characterised by a big SPF number on the bottle. "This refers to the Sun Protection Factor against UVB. An SPF of 15 increase the tolerance of the skin to UVB exposure by 15-fold when applied at a thickness of 2mg/cm² under laboratory conditions, and is able to protect against almost 95% of UVB reaching the skin surface," explains Dr Wong.



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"A common misconception amongst users is that the higher the SPF number, the better. However, usage studies have shown that most people do not apply sunscreen thick enough under normal conditions, and, regardless of the labeled SPF used, are unable to achieve greater than SPF 3 protection with average thickness of 0.5mg/cm². Hence, thickness of application and re-application after wiping, perspiring or swimming are more important than the SPF number itself," stresses Dr Wong.

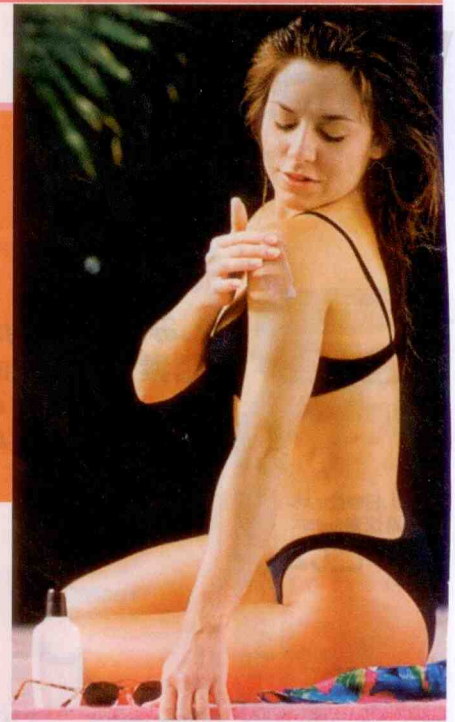
Related to this is the common assumption that compact powder or foundation with SPF 15 can be a substitute for using sunblock. Powder comes off easily, and one seldom uses a thick enough layer of foundation or powder to achieve SPF 15. It is useful as an adjunct on top of applied sunscreens, but should not be relied on as the only means of sun-protection.

Another common misconception is that one is protected from sunburn while using a sunblock, so it is all right to stay for long periods under the sun. "Remember that under best usage conditions, 5% of UVB is still able to penetrate, and it is a matter of time before one gets a burn. Generally, if an individual usually turns red after 10 minute of sun exposure, an SPF 15 sunscreen used optimally will increase this to

10x15 = 150 minutes, after which he can still burn. Additionally, rates of melanoma skin cancer in Western nations increased, paradoxically, after rate of sunscreen use went up. This is attributable to sunbathers spending more time in the sun, due to a false sense of security and lack of burning, and early sunscreens were not protective against UVA," warns Dr Wong.

"UVA protection is very important too, and many newer broad-spectrum sunscreens now incorporate UVA-absorbers (e.g. dibenzolymethanes, Parsol 1789) or reflectors (zinc oxide, titanium dioxide). Unfortunately, there is currently no universally accepted industry standard for labeling UVA protection," adds Dr Wong.

Considering that 85% of sun damage occurs before age of 20, and the effects start becoming obvious to the naked eye in the 30's with sunspots and mottled pigmentation (earlier in those with a lot of sun exposure in early years), Dr Wong tells LiveWell that it would be prudent to start sun protection measures from a young age, such as avoiding outdoor activities between 10am to 4pm, staying in the shade where possible, wearing a cap/hat or carrying an umbrella when outdoors, and using a sunscreen of at least 15 when outdoors. Chemical-free sunscreens



are recommended for young children or sensitive-skin individuals to reduce the chances of allergic reaction or irritation.

Sticky sunscreens can be quite a nuisance

If you feel your sunscreen is too sticky, shop around for other brands. Some have fluid, emulsion or gel formulations that are less sticky. Lower SPF sunscreens, such as 15, and chemical sunscreens also tend to feel less sticky on the skin after about 5 minutes. Loose powder or a powder compact can be dusted on after that to reduce shine.

The bottomline is: What would be more of a nuisance – having to use a host of lightening creams twice daily and undergo repeated laser or light treatments by your dermatologist when you are in your 30's to 40's, or starting with a simple (and cheaper) sun-smart regimen comprising once daily sunscreen and sun avoidance? In addition, some types of pigmentation are not easily treatable and cannot be completely removed. **LW**