

Dermatology Associates of Plymouth Meeting

Patient Newsletter

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Sunscreens: What you need to know

Sunscreens can modify one of the biggest risk factors for skin cancer-sun exposure.

What are sunscreens?

Sunscreens are products that protect the skin from damage caused by ultraviolet radiation (UVR). They do this by using chemicals that absorb and/or block sunlight. Many sunscreens are a combination of chemicals.

Sun=Ultraviolet Radiation: There are three types of ultraviolet radiation (i.e. sunlight)

UVB: primarily responsible for sunburn and suntan. Long term exposure leads skin cancer and premature aging of the skin.

UVA: primarily responsible for premature aging (because it reaches down deeper into the skin) and skin cancers.

UVC: This radiation is very dangerous to the skin, but very little gets through the atmosphere (i.e. ozone layer protection).

Of the UV light from the sun that passes through the atmosphere, the vast majority of it is UVA. The amount of UV light reaching us throughout the day varies. UVB is most intense midday while UVA is fairly constant. UVB light tends to be less in the winter months, while UVA levels are relatively constant year round. UVA is not diminished by clouds, unlike UVB. It was thought for some time that UVB was responsible for the vast majority of damage in sun related skin effects, but now we know that UVA light also plays a notable role in photoaging and skin cancer. New sunscreens block both UVA and UVB.

Key Points about sunscreens

Sunscreens should be applied 30 minutes prior to exposure.

The American Academy of Pediatrics now suggests that even infants should use sunscreens.

No sunscreen offers complete protection against the sun. The term "sunblock" is a misnomer .

No sunscreen is waterproof/sweatproof. Sunscreens should always be applied to dry skin. All sunscreens start to come off during activity. It is important that sunscreens be reapplied after towel drying.

No sunscreen provides all day protection.

High SPF sunscreens do not necessarily offer better protection. SPF indicates the amount of UVB protection a product provides and does not indicate how much if any UVA protection is provided.

Don't worry about sun exposure and Vitamin D: you get enough exposure to activate your Vitamin D by walking to your car!

There is nothing good about tanning parlors-don't be fooled.

Sunscreens should be purchased fresh, each year to ensure functionality.

Certain clothing articles block UV and should state this on the label if it performs this function.

Tanning Creams, although providing no sun protection, are OK to use.

You can get a lot of sun on a cloudy day!

Key Points about sunscreen chemicals to look for: generally, sunscreens are a mixture of chemicals. Most will block UVB. You are looking for sunscreens that block both UVB and UVA also, so if you examine the ingredients of a sunscreen, you will see multiple chemicals mentioned. You should look for the following chemicals on the label:

Avobenzone: blocks UVB and UVA but is broken down by sunlight.

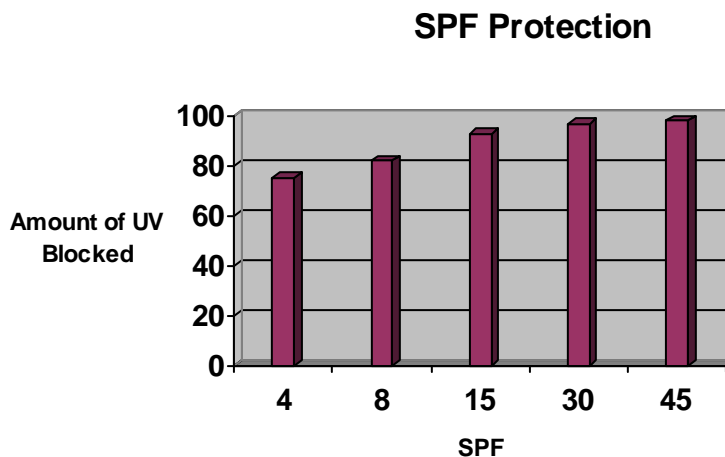
Zinc Oxide: blocks UVB and UVA

Titanium dioxide: blocks UVB and UVA

Helioplex: stabilizes avobenzone by combining three chemicals together (FDA approved).

Mexoryl: UVA filters added to sunscreens with avobenzone making the later stable and a better blocker (this product is NOT FDA approved in the US and is only available abroad).

SPF: The amount of protection provided by a sunscreen (ratio of protected skin/unprotected skin). Notice the difference between the lower SPFs and higher SPFs (70% vs 98%!):



As a rule of thumb, sunscreens only provide 1/3 of the labeled protection value due to lack of proper application and usage (i.e. sweating). So the higher the SPF the better!!!

Favorite Sunscreens

- All around: *Neutrogena Ultra sheer Dry Touch Sunblock SPF 55*
- For oily skin: *DDF Matte Finish Photo Age Protection SPF 30*
- For dry skin: *Almay Sun Protector for Face SPF 30*
- For sensitive skin: *Clinique SuperCcity Block SPF 25.*
- Dermatology Associates carries sunblocks with Zinc for sensitive and facial skin. You can ask our aestheticians for additional information.