

THE "CORRECT" WORD ON SUN PROTECTION

Everybody loves a holiday in the sun or nice day sun bathing in the park. It feels good and is in fact necessary in order to receive proper amounts of Vitamin D. However, there is a safe way to achieve a little sun without over burdening the body with excess freeradical damage and UV radiation. The following provides pertinent information as to the best way to protect yourself from the avoidable sun damage that each of us receive on a daily basis, as well as, the safest way to obtain some rays.

First, what exactly does S.P.F. mean? S.P.F. stands for Sun Protection Factor and refers to a sunscreens ability to absorb UV rays or a sun blocks ability to reflect them. They are measured by timing how long covered with a sunscreen or block it will take for the skin to burn compared to a skin not protected. For example, SPF 15 means it will take 15 times longer to burn with it than without it.

The S.P.F. can range form 2-60, but in reality, an SPF of 30 only protects the skin 4% more than an SPF 15. This is because an SPF 15 absorbs 93% of the UV rays, while an SPF of 30 absorbs 97%.

Additionally, the protection intended from an SPF of any sort is dependent on factors like the amount used and how it is applied, when it is used and how often it is reapplied, and what level of SPF is used and whether it is a screen or a block.

For starters, the amount of product needed to actually receive the amount of SPF intended by the manufacturer is 30-60 mls or $\frac{1}{2}$ tsp. for each appendage, and about half of that for the face. Application should be much like that of painting a wall. Two coats are always better than one. When going out into direct sun light, always apply sunscreens at least 30 minutes before hand. And remember, the rays of which cause the most damage to our DNA and cause pre-mature aging are the UVA rays. These are present even when it is cloudy and raining outside. So, always apply SPF to your face on a daily basis. Reapplication should be done every two hours if in direct sun and at least once a day for daily maintenance. This can be established by either using a mineral based makeup or a spray sun block.

This brings us to question what is the least amount of SPF needed to achieve necessary protection. This too is dependent on a few factors. The Department of Health stands by its existing sun safe advice, recommending that people use a broad spectrum sunscreen - SPF 15 or higher - in conjunction with other methods.

These methods include:

- 1. Stay in the shade between 11am and 3pm and don't rely on sunscreen alone.
- 2. Wear clothes that cover your arms and legs, and a wide-brimmed hat.
- 3. Wear sunglasses that block UV light to protect your eyes.
- 4. Never burn, as sunburn causes permanent damage

Lastly, and most importantly, what is better, a screen or a

block? There seems to be a lot of confusion around this topic; however it becomes quite simple when we come from a stand point of chemicals versus non-chemicals and absorbing UV rays rather than reflecting them. According to the British United Provident Association, "In the UK there are 65,000 cases of skin cancer each year, with 2,000 proving fatal, and numbers are said to be rising faster than for any other form of cancer." Now this can be blamed on the ozone layer depletion or a lack of proper SPF use. Each of these are valid points and needs to be considered, but think for a moment about the function of a sunscreen in relation to that of a sun block. A sunscreen uses **chemicals** as a way of absorbing the UVB rays. These are responsible for our skins ability to tan. (A tan, by the way, is a sign of injury that the skin creates to protect skin cells from DNA damage.) Furthermore, if the sunscreen says "broad spectrum", then it also absorbs UVA rays. Research conducted by scientists, led by Professor Roy Sanders, at the Restoration of **Appearance and Function Trust** (RAFT) at Mount Vernon Hospital in Northwood, Middlesex, discovered that the UVA protection offered by leading sunscreen brands failed to achieve the amount of protection that was suggested. "We were expecting that it [UVA protection] would be lower than the UVB protection," said Dr. Heywood, "but we were surprised by how much lower it was."

So, if you can't trust a sunscreen, can you trust a sun block? Because a sun block reflects the UV rays up and off the skin, allowing for very little penetration, as well as avoids the use of synthetic chemicals, they answer is easy. Ingredients like, **Micronized Titanium Dioxide**, **Micronized Zinc Oxide and Zirconium Oxide** are all natural minerals that are nonirritating and block out both UVA and UVB. Additionally, because they are not chemicals dependent on a time frame, it is only when they are washed off the face by either sweat or water that they become ineffective. Hence, they provide even longer protection than a sun screen can! And if texture and thickness is a problem, new formulations using mineral blocks have been developed that are light weight and do not give off a whitish appearance to the skin. With all that said, the facts are apparent. To establish proper SPF protection, follow these simple guidelines and you're golden, but not literally of course!