



# SUNSCREENS AND TANNING

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Sunscreens have improved so much in recent years that the single most important factor in picking a sunscreen is to put it on regularly, or not. Obviously, it will be suggested that all fair skinned and sun sensitive people use sunscreen regularly. Sunscreens are rated by the SPF number (sun protection factor). This number tells how many times longer one can stay out in the sun without burning. So, a SPF of 15 means that if it takes 30 minutes to get a sunburn, then one can only stay out in the sun for 7 to 8 hours before getting a burn. Higher SPF sunscreens only take out about an additional 3 or 4 percent of the sunlight. So higher numbers really are better, but once one gets past fifteen the difference is not very remarkable, assuming it is applied properly (see below).

It is important to screen out not only the burning rays (called UVB), but also the so-called "tanning rays" (UVA). Dermatologists used to think that UVA was safe, but they now know that it is the major factor in premature aging of the skin, as well as causing skin cancer. So for daily use, to prevent skin cancer, skin aging and wrinkling one needs a sunscreen with a SPF of 15 or more that is not irritating and also blocks UVA light.

There is a controversy in the news that sunscreen may not prevent skin cancer. While not proven, this may be partly true if too little sunscreen is used or it is inconsistently or inadequately applied. Low SPF sunscreens may block out the burning rays that would have given one a sunburn and warned one to get out of the sun. The end result is that people are using sunblock to stay out much longer and collect more damaging rays.

There is little doubt however, that properly used, sunscreens work. In Australia where strict sun protection has been widely used to stem their epidemic of **melanoma**, their rate of melanoma has started to fall while ours keeps rising. Consistent, regular use is the key to preventing skin cancer. It has been shown that occasional overexposures to the sun are what brings on skin cancer.

Most people don't know how to properly use sunscreen. First and foremost, it should be applied everywhere the skin is going to be exposed to the sun, not just the tops of the ears and the nose! If a waterproof sunscreen is chosen because one is going to be sweating or going in the water, it is very important to apply this to cool, dry skin at least thirty minutes before sun exposure, sweating, or going in the water. It is important to use enough sunscreen. It takes one ounce (30 cc's) to cover the average person head to toe. If too thin a layer of sunscreen is applied, it does not work. This is why some people can apply a SPF of fifteen or twenty and still get sunburn. They simply used too little and spread it too thinly. Take a look at how many ounces are in that bottle of sunscreen, and figure how much to use accordingly. It is also important to reapply sunscreen after being in the water for an extended time or vigorous physical activity that results in profuse sweating.

Clothing is also very helpful. A hat and a shirt give an additional layer of protection. Ordinary clothing alone may not be enough though a t-shirt has SPF 7 and stockings/nylons are SPF 2. Overall, thick fabrics are better and dyes help more than whites.

Tanning beds expose the skin to ultraviolet A (UVA), the so-called tanning rays. Tanning beds are less likely to cause skin cancer than lying out in the natural sun, but they are not completely safe by any means. First of all, the tanning lights are not pure UVA. 5% of the output of a tanning light is UVB. Secondly, UVA light penetrates the skin deeper than the shorter UVB or "burning rays. This results in premature aging including wrinkling, a leathery appearance to the skin, and brown spots. Even more importantly, UVA is a major cause of all types of skin cancer especially **squamous cell carcinoma**. It is not known yet how bad it is for **malignant melanoma**, which is the most deadly form of skin cancer. So cover up, use sunscreen, and avoid tanning beds. To get a tan color, use sunless tanning lotions along with sunscreen.

**This information has been provided to you compliments of the American Osteopathic College of Dermatology and your physician.**

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