# Choosing the Right Sunscreen

Your questions answered

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About 90% of all skin cancers, including melanoma, are directly related to exposure to ultraviolet radiation from the sun. Fortunately, you can dramatically reduce your risk by choosing, applying, and reapplying the right sunscreen.

Bold claims and conflicting advice about what goes into a good sunscreen make it easy to feel overwhelmed when buying sunscreen. At MRA, we believe that the best sunscreen is one that you will wear. Provided that it meets three simple rules:

1. Make sure it says “broad spectrum”: Broad-spectrum sunscreens protect you from UVA rays that age your skin and cause wrinkles and UVB rays which actually burn your skin. It’s important to find a sunscreen that provides broad-spectrum protection because exposure to UVA and UVB rays can cause cancer!

2. At least SPF 30: SPF, or sun protection factor, measures how much UVB radiation is required to burn your protected skin versus the radiation exposure needed to burn unprotected skin.[1] As the SPF increases, your relative protection from sunburn increases too. A sunscreen labeled as SPF 15 will protect your skin from about 93% of UVB rays and SPF 30 blocks about 97%. The higher the SPF, the more protection it offers up to about SPF 50. After this point, higher SPF ratings will cost more while only providing a slight additional benefit. Don’t be fooled: We almost always get less protection than what is advertised because people tend to use less sunscreen than what is used for testing!

3. Water resistant: First things first, no sunscreen is waterproof. Instead, sunscreens can be rated as water resistant for 40 or 80 minutes. With water resistant sunscreens, you’ll still need to pay special attention when swimming or sweating to make sure that you reapply sunscreen as directed, but you won’t need to worry as often.

Keep in mind: Sunscreen is only as good as you (re)apply it. Don’t skimp when lathering up with your preferred sunscreen. Sunscreens work, but only if you apply it correctly and then reapply as directed! You should use about one ounce when applying it to your body — for reference that’s about the size of a shot glass. Then, you should re-apply every two hours or after you get out of

the water which can wash it off your skin sooner.

## Answers to Your Sunscreen Questions

### How does UV exposure impact your skin?

Ultraviolet (UV) rays are a part of sunlight that is an invisible form of radiation. UV rays can penetrate and change the structure of skin cells, as well as lead to cancer-causing mutations in the DNA of these cells. Such changes can cause skin cancer and premature skin aging. Exposure to UV rays from the sun or tanning beds is the most preventable risk factor for melanoma.

### How does sunscreen work?

Most sun protection products work by absorbing, reflecting, or scattering the sun's rays. These products contain chemicals that interact with the skin to protect it from UV rays. Broad-spectrum sunscreens protect against UVA and UVB rays, the two main components of the sun's rays. UVA and UVB rays damage the skin in different ways, but both can lead to the development of skin cancer.

Most sunscreens use the SPF rating, which stands for sun protection factor. It is a measure of time that the sunscreen can protect against the sun's rays. So the higher the SPF, the longer the protection. But a good rule of thumb is to reapply every 2 hours.

### Should I wear sunscreen every day?

Yes. UV radiation can damage skin in the winter, even though the sun is not as strong. The sun's rays can penetrate clouds, haze, and smoke, so sunscreen should be used even on cloudy days.

### Why is it important to reapply sunscreen frequently?

There are three reasons why sunscreens should be reapplied frequently:

- Sunscreens can be physically rubbed off, such as when drying yourself with a towel.
- Sunscreens can be washed off when swimming or with heavy sweating.
- Some of the active ingredients in sunscreens start to break down over time. This break down can be accelerated by sun exposure.

These three factors can prevent sunscreens from providing the level of protection indicated by the SPF value. Generously apply sunscreen 15-30 minutes before going outdoors and reapply at least every two hours, or after swimming or sweating heavily.

### If I don't get enough exposure to light, will I get enough Vitamin D?

A blood test ordered by your doctor is the only way to know if your levels of Vitamin D are sufficient. MRA encourages everyone to beware of the dangers of UV exposure and advises that people do not need to put themselves at risk of melanoma and other skin cancers to get Vitamin

D. If you and your doctor decide you are not getting enough Vitamin D, vitamin supplements offer a safe alternative source of Vitamin D without carcinogenic risk.

Are sunscreens safe?

Sunscreens are absolutely safe. The FDA rigorously evaluates all sunscreens before they are brought to market to ensure that they are both safe and effective.

Mineral or chemical sunscreen?

There is no right or wrong answer to this question. Both chemical and mineral sunscreens are safe and effective ways to reduce your UV exposure. Some articles claim chemical sunscreen ingredients like oxybenzone or retinyl palmitate are harmful and could actually cause skin cancer. These claims are based on animal models where mice were fed extremely large amounts of sunscreens — far more than a person would ever be exposed to. It's far more important that you find a sunscreen that you enjoy wearing every day, rain or shine.

What about the sunscreen in my makeup or moisturizer? Is it enough?

Your moisturizer with SPF is better than nothing, but it isn't as good as a dedicated sunscreen. A study released in July demonstrated that even though both theoretically offer the same level of protection, in the real world people tend to miss sections of their face when using moisturizer or not use enough product to adequately cover their skin.

Are tanning beds a safe alternative to being in the sun?

No. Tanning beds are just as damaging as the sun because they emit similar UV radiation that can cause the same type of sunburn and mutations in the skin. The World Health Organization has classified indoor tanning devices as cancer-causing agents. Research shows that those who use indoor tanning devices have up to a 75% increased risk of melanoma. The risk increases with greater years of use, number of sessions or total hours of use.

Many states in the United States and the federal government have taken steps to increase the regulation of tanning devices, specifically use by minors, because of the health problems they pose.

I'm going on vacation and don't want to get a sunburn. Shouldn't I get a "base tan" to protect my skin?

Many people think that a "base tan" protects their skin from a damaging burn. The truth is that a tan is really a sign of skin damage. Your body's defensive response to harmful UV rays is to generate the pigment melanin to protect its skin cells. Tanning exposes your skin to a greater amount of UV radiation and increases your risk of developing skin cancer. The best way to protect your skin while out in the sun is to use sunscreen, wear protective clothing, and avoid the sun in the middle of the day.

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