



Cosmopolitan Magazine - Dangers of Suntanning

**The Indoor Tanning Association is claiming that getting a base tan helps you avoid getting sunburned and actually protects your skin from greater sun damage. Can you address this?**

Certainly. This claim is absolutely preposterous. The only time your skin produces a tan is when the cells are damaged. In fact, research has shown that one of the major factors in producing a sun tan is damaged fragments of DNA floating around in the cells that cause a release of melanin, which is the pigment producing a tan. When someone gets a tan, even a base tan, this is a result of damaged DNA. So to say damaging DNA is helpful makes no sense at all. The production of a tan is an evolutionary process that is designed to protect humans from cellular damage. The cells are actually crying out for help. They are saying, "Our DNA is damaged. We need to do something dramatic to prevent further damage." When you see a tan, it's as if the cells are sending out the life boats for help. When you see a tan, you are not seeing something that is healthy, you are actually seeing the results of something that is very harmful and produce skin cancer and death..

**The Indoor Tanning Association also claims that there is no direct link between melanoma and tanning. What role does ultraviolet rays play in skin cancer? Doesn't the number of sunburns you have had in your life, particularly when you are younger, drastically increase your risk of melanoma?**

The Indoor Tanning Association's claim that there is no direct link between melanoma and tanning is both false and irresponsible. These claims are very reminiscent of the big tobacco

made many years ago that there was no link between cigarette smoking and lung cancer and that cigarette smoking was not bad for you. At the time, we all knew that was not true and we certainly can realize that these claims are equally ludicrous.

Let me make this clear, the goal of the Indoor Tanning Association's comment is for the preservation of their business and for profits. It is shameful that an association would look to profit from something that has the potential to kill people.

Skin cancer remains a serious health problem and overexposure to ultraviolet radiation from the sun and artificial devices such as indoor tanning is a well-known risk factor. Research has demonstrated that the absolute risk of indoor tanning. The United States Department of Health and Human Social Services has declared ultraviolet radiation from the sun and artificial sources such as indoor tanning as a known carcinogen.

I see the dangers of exposure to ultraviolet radiation on a regular basis in my practice. For example, I see many patients who have spent years as over-the-road truckers. When I examine them, I find several skin cancers on their left arm and the left side of their face, that is, areas that exposed to ultraviolet radiation, where the right side of their face and right arm are relatively uninvolved. So to say that ultraviolet radiation has no influence on skin cancer is, to put it kindly, is nothing more than a lie.

Recent studies have shown that exposure to ultraviolet light can also be addictive because of the production of endorphins, which can initiate dependency. A recent report in the Journal of the American Academy of Dermatology indicates that indoor tanning device users are more likely to show signs of addiction. So indoor tanning in addition to causing skin cancer which can kill you might be even more insidious because it can actually become an addiction that you can avoid. This too is reminiscent of big tobacco and their previous claims.

Your risk of skin cancer including melanoma, squamous cell carcinoma, and basal cell carcinoma is directly linked to the amount of sun exposure you have in your life. In fact, chronic exposure and the number of blistering sunburns you have had in your life are direct factors in the cause of skin cancer.

In fact, indoor tanning is so dangerous that the American Academy of Dermatology recommends three warning points as follows:

1. No minor should be permitted to use indoor tanning devices.
2. A surgeon general's warning should be placed on all tanning devices.
3. No person or facility should advertise the use of any UVA or UVB tanning devices with words such as safe, or safe tanning, or no harmful rays, or no adverse effects, or similar wording.

I am a realist. I know that there are social pressures to have a tanned look. For those who desire it, there are some very good sunless tanning lotions. One still needs sun protection because these sunless tanning lotions offer none, but for the look without the DNA damage, this is the alternative that I recommend to my patients.

For additional information concerning the American Academy of Dermatology's position on indoor tanning, please visit [www.aad.org/media/psa/index.html](http://www.aad.org/media/psa/index.html).

**The Indoor Tanning Association is suggesting that everyone needs regular ultraviolet exposure without sunscreen to get enough vitamin D. I think I have read 5 minutes of exposure is enough to supply the necessary amounts of vitamin D. Is this correct? Don't some foods contain vitamin D?**

The goal of the Indoor Tanning Association is not for the better health of people via vitamin D production. Their motivation is for the preservation of their business and the continuation profits. It is shameful that an association would look to profit from something that has the potential to kill people.

I am deeply concerned by the recent reports linking health benefits of vitamin D to unprotected ultraviolet light exposure and the ability to mislead the public about the very real dangers of ultraviolet exposure, the known leading cause of skin cancer. I realize that the Indoor Tanning Association's motivation is not for the health of people but that it is for their own profits, and I am very sorry that they have misconstrued this information to say that tanning is healthy. I don't think anything that can kill you is healthy. With respect to vitamin D levels, vitamin D is a necessary vitamin, but there are many safe sources of vitamin D. One should always discuss supplementation with their physician, but vitamin D can be found in food supplements such as fortified milk, cheeses, and yogurt, as well as fortified cereals, and oil fishes such as salmon and tuna. Additionally, vitamin D supplements can be purchased at every pharmacy in the United States at very little cost. Research shows that vitamin D supplements are well tolerated, safe, and effective. These are all excellent options to obtain necessary levels of vitamin D without exposing yourself to something that can cause cancer and death.

In the United States, there are over 1 million new cases of skin cancer reported yearly, and overexposure to ultraviolet radiation including tanning beds is the greatest risk factor for the formation of skin cancer.

In the United States, one person dies of melanoma every hour of every day of the year. In summary, there is no such thing as a safe tan.

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