

Sunless Tanning Products Not without risk

“Some think turning light skin darker gives off an aura of good health. But a suntan actually signals skin damage.”¹ Still, many strive for a tanned appearance as the summer sun rises...others want to maintain this appearance even through the winter months. Thus, many are turning to sunless tanning products. Before you make this choice, you should know the associated risks.

There are three main types of sunless tanning products being marketed today; two of the three are unapproved by the U.S. Food and Drug Administration (FDA) and, therefore, are not deemed safe for your use:

- Tanning accelerators – unapproved by FDA
- Tanning pills – unapproved by FDA
- DHA (dihydroxyacetone) sprays and lotions – approved by the FDA, if used correctly.

Tanning Accelerators



Tanning accelerators are products marketed with claims that it speeds up the skin's melanin production.² The skin

produces a pigment called melanin when exposed to the sun to try to protect itself from burning.¹ Tanning accelerators generally supply doses of tyrosine (an amino acid) or its derivatives, sometimes in combination with other substances. The FDA, however, has stated that the marketing claims that these products speed up melanin production have not been substantiated in scientific literature.² “The agency notes that any product purporting to ‘accelerate the tanning process’ or ‘stimulate the production of melanin’ is claiming to affect the structure and function of the body and therefore

is a drug. The agency is not aware of any data demonstrating that tyrosine or its derivatives are effective in stimulating the production of melanin. Thus, any product containing tyrosine or its derivatives and claiming to accelerate the tanning process is an unapproved new drug.”²

Tanning Pills

There are no pills approved for tanning uses by the FDA.³ “Pills that contain large doses of canthaxanthin are sometimes marketed as ‘tanning pills.’ Although FDA has approved canthaxanthin for use as a color additive in foods, where it is used in small amounts, its use as a tanning agent is not approved. Imported tanning pills containing canthaxanthin are subject to import detention as products containing non-permitted color additives.

When a person ingests canthaxanthin in large quantities, the substance is deposited in various parts of the body, including the skin, where it imparts a color ranging from orange to brownish. Tanning pills have been associated with side effects, particularly a condition called ‘canthaxanthin retinopathy,’ the formation of yellow deposits in the retina of the eye.”⁴ According to the American Academy of Dermatology, canthaxanthin has also been reported to cause liver injury and a severe itching condition called urticaria.³

DHA Sprays & Lotions

Dihydroxyacetone (DHA)-containing sunless tanning products have been approved by the FDA for use as a tanner since 1977 and have typically been used in over-the-counter (OTC) lotions and creams.¹ DHA is the only color additive currently approved by the FDA for this purpose. DHA interacts with the dead surface cells in the outermost layer of the skin to darken skin color.¹ Its use is restricted to external application, which means that it shouldn't be sprayed in or on the mouth, eyes, or nose.¹

There are several types of DHA-containing sunless tanning products marketed as sunless tanners,

self-tanners, tanning extenders, or bronzers. These products can be difficult to apply, and the chemicals may react differently on various areas of your body, resulting in uneven coloring.

The term 'bronzer' refers to a variety of products used to achieve a temporary tanned appearance. Some are applied topically to stain the skin temporarily. Usually, soap and water will remove them. They may streak after application and, when wet, some may stain clothing.

Among other products marketed as bronzers are tinted moisturizers and brush-on powders. These also produce a temporary effect, similar to other types of makeup. Still others are combination products that also contain DHA.⁴

During the last few years, some companies have offered a sunless option that involves spraying customers in a tanning booth with the color additive DHA.¹

DHA should not be inhaled, ingested, or used in such a way that the eyes and eye area are exposed to it because the risks, if any, are unknown. For consumers who choose to get DHA spray in tanning booths, the FDA recommends protective measures for the eyes, nose, and mucous membranes.¹

When using DHA-containing products as an all-over spray or mist in a commercial spray "tanning" booth, it may be difficult to avoid exposure in a manner for which DHA is approved, including the area of the eyes, lips, or mucous membrane, or even internally. Consequently, FDA advises asking the following questions when considering commercial facilities where DHA is applied by spraying or misting:

- Are consumers protected from exposure in the entire area of the eyes, in addition to the eyes themselves?
- Are consumers protected from exposure on the lips and all parts of the body covered by mucous membrane?
- Are consumers protected from internal exposure caused by inhaling or ingesting the product?

If the answer to any of these questions is "no," the consumer is not protected from the unapproved use of this color additive. Consumers should request measures to protect their eyes and mucous membranes and prevent inhalation.⁵

Warning

Even if you choose to use an approved sunless tanning product, most do not contain sunscreen, which is still necessary to prevent excessive damage from the sun's rays, or they only contain a small amount (e.g., SPF 4).⁶

FDA regulations require all tanning products that do not contain sunscreen to have the following warning statement on the label:

Warning— This product does not contain a sunscreen and does not protect against sunburn. Repeated exposure of unprotected skin while tanning may increase the risk of skin aging, skin cancer, and other harmful effects to the skin even if you do not burn.

Tanning products that do not contain sunscreens and do not protect against the harmful effects of UV light are regulated as cosmetics. FDA requires this warning statement so that consumers are fully informed that such products do not provide protection from the sun.⁷

Sources:

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4. United States Food and Drug Administration (2003). Sunscreens, tanning products, and sun safety. Retrieved May 20, 2005. From <http://www.cfsan.fda.gov/~dms/cos-220.html>.
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7. Thompson, L. (2003). Trying to look sunsational? Complexity persists in using sunscreen. Retrieved May 20, 2005. From <http://www.cfsan.fda.gov/~dms/fdacsun.html>.