

## Tanning Lotions

The public still views a tan as attractive and “healthy” appearing when in actual fact a tan is a sign of skin damage. Because tans are still in fashion, cosmetic companies have produced self-tanning lotions in a response to demand for a safe way to tan. Sunless or self-tanning lotions appear to be safe and effective for most individuals. These products are becoming more and more popular each day. The most important thing to remember is that the lotions do not protect the skin, so you can burn just as easily as if you had no tan. The tan is not real so the skin is left unprotected.

Tanning lotions are just one of several types of products which are available. One group of products is known as bronzers. These are usually available in gel formulations, and produce a darker color on the skin by the use of water-soluble dyes. Bronzers color the skin immediately, but the color fades with the first wash. Tan accelerators are another group of products. They contain a natural enzyme that stimulates the production of melanin (the body's natural tan creating enzyme) with exposure to sunlight but have not proven to be effective. The FDA is cracking down on these products because they do not work. Tanning promoters are a group of products containing 5-methoxypsoralen that are not available in the United States and have been reported to cause cancer in mice and severe sunburn reactions in humans. Tanning pills, which contain the drug canthaxanthrin, work by promoting the deposition of carotenoid in the skin. Carotenoid is a chemical similar to Vitamin A found in carrots. These pills have been banned in the United States. Recent studies show that these pills can have life threatening side effects and have been known to cause blindness.

The last groups of products are the sunless or self-tanning lotions and these have been proven to be safe and quite effective. The active ingredient in these products is dihydroxyacetone (DHA) which has been shown to be safe by the Food and Drug Administration. These products were first discovered by the Germans in the late 1920's when DHA was spilled on the skin and a brown color appeared. DHA gives color to the skin through a “browning reaction.” When applied to the skin DHA changes into a sugar that combines with amino acids in the skin to form chemical compounds known as melaninoids which are brown in color. By using the self-tanning lotions and avoiding the sun as much as possible, you will decrease your risk of getting skin cancer.

Application of these tanning lotions is fairly simple. After a single application, a color change can be seen within an hour. Manufacturers are beginning to produce self-tanning lotions in different shades, however, an inexperienced user may want to start with a lighter shade at first. One should look for products that have a DHA concentration of 3%-5%. These give slower “tans” but do not cause the skin to turn an orange shade as some of the older products do. Self-tanning lotions work better for people with medium complexions. They work less well for people with very fair or very dark skin. You will get the best chemical tan with 2-4 applications several hours apart on the same day, with repeated use every few days afterwards. You can improve the tan by buffing or rubbing the skin lightly with a towel, then showering immediately before applying the product. You must wash your hands after applying the product to avoid staining of the palms. The face requires fewer initial applications but more frequent reapplication to achieve the desired appearance. For those with sun-damaged skin, self-tanning lotions produce an uneven color; therefore, if your skin is severely sun-damaged you should not use these lotions. Also in people with older skin or mottled or freckled skin, these lotions could produce an uneven effect. Hair and nails may color, but not the lips. Scars will color poorly.

The side effects that could be associated with these tanning lotions containing DHA are very minor, although most individuals have no side effects at all. There have been only two reports of individuals showing an allergic reaction. By using self-tanning lotions and by avoiding sunlight one can still have a fashionable tan without the risks of aging of the skin and skin cancer. The most important thing to remember is that the sunless tan offers no protection against sunlight. Some of the newer sunscreens contain self-tanning lotion. These would protect against sunlight when used like ordinary sunscreens.