MotherToBaby | FACT SHEET

# Self-tanners, Tanning Pills, Tanning Booths

This sheet is about exposure to self-tanners, tanning pills and tanning booths in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

### What are self-tanners?

Self-tanners are lotions, gels, and sprays that are applied to the skin to darken it, making the skin look "tan" without sun exposure. The active ingredient in self-tanners that makes your skin darker is dihydroxyacetone (DHA). (Not to be confused with the other DHA, docosahexaenoic acid, an omega-3 fatty acid found in some foods and dietary supplements.)

DHA often comes from plant sources such as sugar beets and sugar cane, and is considered a non-harmful skincoloring agent. The Food and Drug Administration (FDA) approved DHA as a tanning product in the United States in the 1970's. Most self-tanning products that you can buy in stores contain 3-5% DHA, while the products used by professionals contain 5-15% DHA. Self-tanning products do not provide protection from the harmful effects of the sun. It is suggested to still use sunscreen and protective clothing to shield yourself from the sun when using these products.

#### Are self-tanners absorbed into my bloodstream if I'm using them on my skin?

Although not well-studied, it is estimated that only one-half of one percent (0.5%) of DHA is absorbed into the bloodstream when self-tanners are applied on the skin. There is no information available as to whether this small amount is able to cross the placenta and get into the baby's circulation.

#### What about using booths which spray self-tanner on me?

The FDA limits the use of DHA to external application only and has not approved its use as an all-over spray. Avoid using it near mucous membranes (eyes, eyelids, mouth, lips, nose or ears). This may be hard to avoid when using a "spray tanning" booth. It is suggested to ask for protective measures to cover your eyes, mouth and nose, to prevent inhaling the chemical.

#### What are tanning pills?

Tanning pills are tablets containing a chemical called canthaxanthin as the main active agent. A person has to ingest a very large amount of canthaxanthin in order for his or her skin to change color. Although canthaxanthin, when used in small amounts, is approved by the FDA as a color additive in food, tanning pills are not approved by the FDA. This means that tanning pills are not regulated. Please see the MotherToBaby fact sheet on supplements for more information https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/. There are no human studies on the use of canthaxanthin during pregnancy.

### I use self-tanners, tanning pills, or tanning booths. Can they make it harder for me to get pregnant?

There is no evidence to suggest that using self-tanners makes it more difficult to become pregnant. Tanning pills are taken orally, so there is a greater chance that a person could ingest a very large amount of canthaxanthin. There are no studies regarding the safety of using tanning pills while trying to become pregnant. Using tanning booths is not expected to make it harder to become pregnant.

### Does using self-tanners or tanning pills increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. Studies have not been done to see if these increase the chance for miscarriage.

#### Does using self-tanners increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. There is no published information suggesting that using topical self-tanners during pregnancy causes birth defects. When self-tanners are used, it is thought that only very small amounts of DHA are absorbed into the bloodstream through the skin. That means very little DHA would be available to get to the baby if it does cross the placenta.



It is possible that if you are inhaling the self-tanning spray fumes in tanning booths, or applying the product to mucous membranes, more of the DHA could get into your system and result in higher blood levels. There is no information to prove the safety of using self-tanners while pregnant.

#### What about using tanning booths while pregnant?

Dermatologists recommend avoiding tanning beds altogether, whether you are pregnant or not. Even though ultraviolet rays do not enter the uterus during pregnancy, if your body becomes overheated, your body temperature will rise, causing the baby's body temperature to increase (called hyperthermia). With too much exposure, this might increase the chance for miscarriage or an opening in the spine (spina bifida). For more information, please see the MotherToBaby fact sheet Hyperthermia at https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/.

# Does using self-tanners, tanning pills, or tanning booths in pregnancy increase the chance of other pregnancy related problems?

Studies have not been done to see if these increase the chance for pregnancy-related problems such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces (2500 grams) at birth).

# Does using self-tanners, tanning pills, or tanning booths in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if self-tanners can cause behavior or learning issues for a person exposed during a pregnancy.

## Breastfeeding while using tanning pills:

There are no studies on the use of canthaxanthin during pregnancy or breastfeeding. Canthaxanthin use has been reported to cause an orange discoloration of the plasma (the colorless fluid part of blood or milk), which may or may not cause discoloration of breast milk. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

# If a male uses self-tanners, tanning pills, or tanning booths, could they affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Constant spikes in body temperature can decrease sperm production, so it is important not to become overheated in a tanning booth. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

#### Please click here for references.

#### Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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