

Study: Many Sunscreens May Be Accelerating Cancer

WASHINGTON (May 24) -- Almost half of the 500 most popular sunscreen products may actually increase the speed at which malignant cells develop and spread skin cancer because they contain vitamin A or its derivatives, according to an evaluation of those products released today.

AOL News also has learned through documents and interviews that the Food and Drug Administration has known of the potential danger for as long as a decade without alerting the public, which the FDA denies.

The study was released with Memorial Day weekend approaching. Store shelves throughout the country are already crammed with tubes, jars, bottles and spray cans of sunscreen.

The white goop, creams and ointments might prevent sunburn. But don't count on them to keep the ultraviolet light from destroying your skin cells and causing tumors and lesions, according to researchers at Environmental Working Group.

In their annual report to consumers on sunscreen, they say that only 39 of the 500 products they examined were considered safe and effective to use.

The report cites these problems with bogus sun protection factor (SPF) numbers:

- The use of the hormone-disrupting chemical oxybenzone, which penetrates the skin and enters the bloodstream.
- Overstated claims about performance.
- The lack of needed regulations and oversight by the Food and Drug Administration.

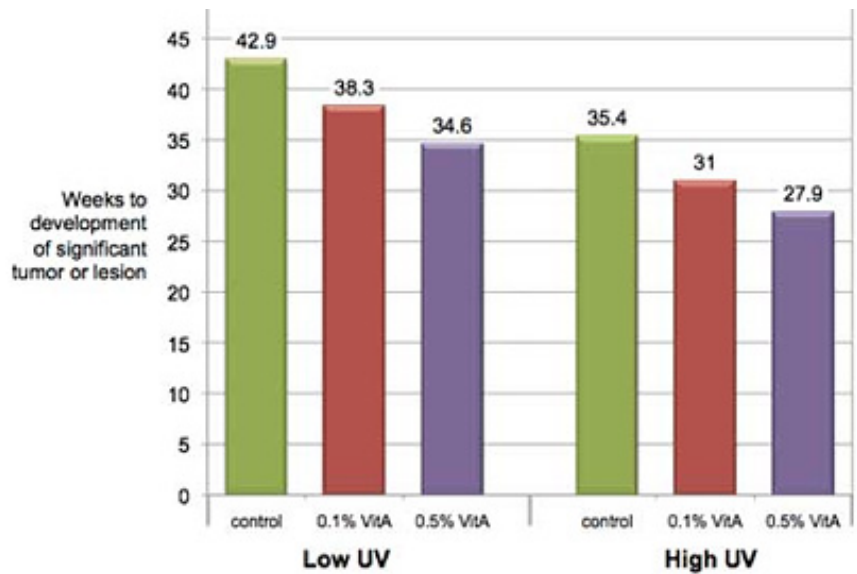
But the most alarming disclosure in this year's report is the finding that vitamin A and its derivatives, retinol and retinyl palmitate, may speed up the cancer that sunscreen is used to prevent.

A dangerous additive

Low doses of Vitamin A (retinyl palmitate) significantly speed growth of skin tumors and lesions in lab animals.

The industry includes vitamin A in its sunscreen formulations because it is an anti-oxidant that slows skin aging.

But the EWG researchers found the initial findings of an FDA study of vitamin A's photocarcinogenic properties, meaning the possibility that it results in cancerous tumors when used on skin exposed to sunlight.



Environmental Working Group

"In that yearlong study, tumors and lesions developed up to 21 percent faster in lab animals coated in a vitamin A-laced cream than animals treated with a vitamin-free cream," the report said.

The conclusion came from EWG's analysis of initial findings released last fall by the FDA and the National Toxicology Program, the federal government's principle evaluator of substances that raise public health concerns.

EWG's conclusions were subsequently scrutinized by outside toxicologists.

Based on the strength of the findings by FDA's own scientists, many in the public health community say they can't believe nor understand why the agency hasn't already notified the public of the possible danger.

"There was enough evidence 10 years ago for FDA to caution consumers against the use of vitamin A in sunscreens," Jane Houlihan, EWG's senior vice president for research, told AOL News.

"FDA launched this one-year study, completed their research and now 10 years later, they say nothing about it, just silence."

On Friday, the FDA said the allegations are not true.

"We have thoroughly checked and are not aware of any studies," an FDA spokesperson told AOL News. She said she checked with bosses throughout the agency and found no one who knew of the vitamin A sunscreen research being done by or on behalf of the agency.

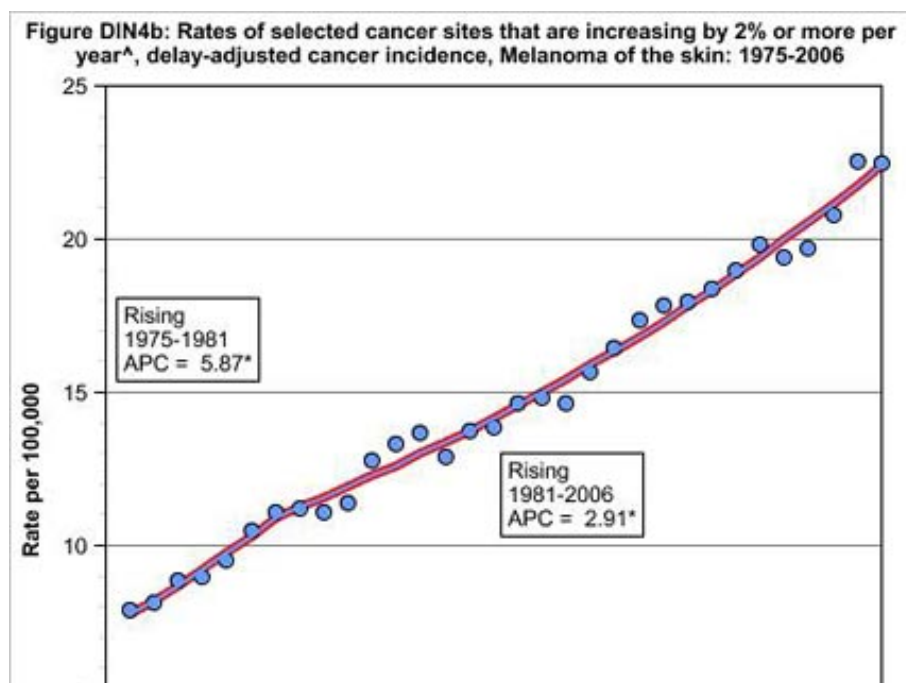
But documents from the FDA and the National Toxicology Program showed that the agency had done the research.

"Retinyl palmitate was selected by (FDA's) Center for Food Safety and Applied Nutrition for photo-toxicity and photocarcinogenicity testing based on the increasingly widespread use of this compound in cosmetic retail products for use on sun-exposed skin," said an October 2000 report by the National Toxicology Program.

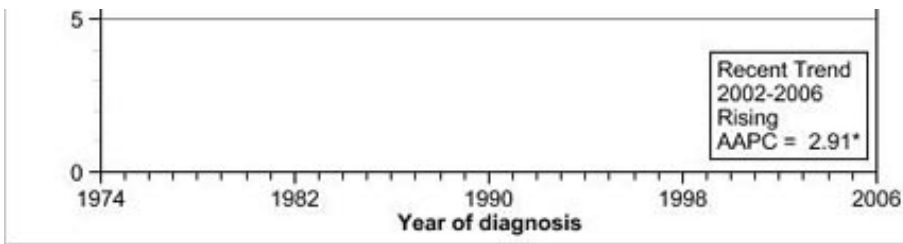
FDA's own website said the animal studies were done at its National Center for Toxicological Research in Jefferson, Ark. And it was scientists from the FDA center and National Toxicology Program who posted the study data last fall.

In a perfect world

The ideal sunscreen would completely block the UV rays that cause sunburn, immune suppression and damaging free radicals. It would remain effective on the skin for several hours and not form harmful ingredients when degraded by UV light, the report said.



But in the U.S., there is currently no sunscreen that meets all of these criteria. European countries have more chemical combinations to offer, but in the U.S. the major choice is between the "chemical" sunscreens, which have inferior stability, penetrate the skin and may disrupt the body's hormone systems, and "mineral" sunscreens zinc and



National Cancer Institute

Graph of melanoma of the skin rates from 1975 to 2006. APC stands for annual percent change and AAPC stands for average annual percent change.

believe have serious health implications.

The sunscreen industry cringes when EWG releases its yearly report -- this is its fourth. The industry charges that the advocacy group wants to do away with all sunscreen products, a claim that is not accurate.

The report's researchers clearly say that an effective sunscreen prevents more damage than it causes, but it wants consumers to have accurate information on the limitations of what they buy and on the potentially harmful chemicals in some of those products.

EWG does warn consumers not to depend on any sunscreen for primary protection from the sun's harmful ultraviolet rays. Hats, clothing and shade are still the most reliable sun protection available, they say.

Don't count on the numbers

Some of us are old enough to remember when the idea of having a tan was good, a sign of health, when billboards and magazine ads featured the Coppertone girl showing off her tan when a puppy pulls down her bathing suit bottom.

Going for that tan, we coated our kids and ourselves with sun blockers with sun protection factors of 1 or 2. Some overly cautious parents might have smeared on a 4 during the hottest part of a day.

But we've learned of the dangers that come from exposure to the sun's rays, especially ultraviolet A and B. So today, drugstore shelves are crammed with sunscreens boasting SPFs of 30, 45, 80 or even higher.

However, the new report says those numbers are often meaningless and dangerous because products with high SPF ratings sell a false sense of security, encouraging

titanium dioxide.

Increasingly, as [AOL News reported](#) in March, the industry is using titanium dioxide that is made nanosized, which a growing number of researchers

people using them to stay out in the sun longer.

"People don't get the high SPF they pay for," the report says. "People apply about a quarter of the recommended amount. So in everyday practice, a product labeled SPF 100 really performs like SPF 3.2, an SPF 30 rating equates to a 2.3 and an SPF 15 translates to 2."

In 2007, the report says, the FDA published proposed regulations that would prohibit manufacturers from labeling sunscreens with an SPF higher than "SPF 50." The agency wrote that higher values would be "inherently misleading," given that "there is no assurance that the specific values themselves are in fact truthful."

This is being widely ignored by the sunscreen makers who are heavily advertising their 80, 90 and 100 SPF products.

"Flouting FDA's proposed regulation," companies substantially increased their high-SPF offerings in 2010 with one in six brands now listing SPF values higher than 50. "Neutrogena and Banana Boat stand out among the offenders, with six and four products labeled as 'SPF 100,' respectively," the new report says.

The full list of the best and worst sunscreens can be found on the EWG's [searchable database](#). (Update: The database has been loading slowly today. You may want to try it again later.)