

Paraben Articles

Parabens Linked to Excessive Aging of Skin

By Simon Pitman

29/08/2005 - Researchers in Japan say that methylparaben, a commonly used antiseptic agent for a range of cosmetics products, may cause skin to age when it is exposed to ultraviolet rays.

The ingredient, which has been connected to occasional skin allergies and skin sensitization in the past, is currently listed as appearing in 3,559 products in the Environmental Working Group's database of cosmetics products sold in the US.

It is said to have a strong antibacterial effect, as well as providing a mild stimulation affect that can be beneficial to skin's health.

It appears in a cross spectrum of products, including hair care, styling products and body scrubs. But researchers at the Kyoto Prefectural University of Medicine say that they are particularly concerned about a range of topical facial cosmetics products that are often used on a daily basis.

Because the product is included in daily applied powders, foundations, sun milk, and, ironically, anti-ageing products the researchers are particularly concerned by their findings.

"I think women should avoid strong and direct sunshine when wearing cosmetics containing methylparaben," professor Toshikazu Yoshikawa told The Asahi Shimbun.

According to the newspaper report, researchers applied methylparaben to skin in similar amounts to that found in cosmetics products. The skin was then exposed to 30 millijoules of ultraviolet rays per square centimeter – an amount that is deemed to be about the average daily amount of exposure during summer weather.

The researchers' results showed that around 19 per cent of the exposed skin cells died, while the fatality rate for skin that did not contain methylparaben was about six per cent.

Furthermore the amount of lipid peroxide – a substance that speeds up the ageing process – was said to be about three times the total of that found in the untreated skin cells.

The researchers believe that these results would mean a higher rate of wrinkling, dark spots and other signs of ageing such as diminished skin tone.

In the past the paraben chemical family has been linked to cancers – particularly breast cancer in women. As a result manufacturers have been progressively moving away from the chemical as ingredients providers strive to come up with alternatives.

The US Environmental Protection Agency (EPA) in their report "Pharmaceuticals and Personal Care Products in the Environment: Agents of Subtle Change?"

reported that **the chemical preservatives called parabens—methyl, propyl, butyl and ethyl (alkyl-p-hydroxybenzoates)—displayed estrogenic activity in several tests.** This means that **these chemicals mimic your body's own hormones and can have endocrine-disrupting action when they are rubbed into your body or washed down the drain into your drinking water.** These disruptors interfere with your body's endocrine system: your hypothalamus, your ovaries, your thyroid—virtually every system in your body. The EPA also stated that **"continual introduction of these benzoates (parabens) into sewage treatment systems and directly to recreational waters from the skin leads to the question of risk to aquatic organisms."** **Scientists in Europe found other endocrine-disrupting body care chemicals in the bodies of fish that humans are eating, and in human breast milk**

Definition of Parabens

This group of chemicals is used as preservatives in many cosmetics and toiletries. They have been around since the 1940's and are cheap and generally well tolerated. The reported sensitivity rate is up to 3.5% in the general population, although people with sensitive skin associated with eczema or dermatitis may have higher sensitivity

There are 5 types of parabens commonly used:

- Methylparabens
- Ethylparabens
- Propylparabens
- Butylparabens
- isoparabens

Many products will have 2 or more of these chemicals as part of a preservative system.

Check the label of any of your existing products to see if they contain a parabens ingredient

Parabens: The Toxins in Your Anti-Aging Cream

By Dr. Lynne Kavulich

There is a potentially dangerous chemical that may be lurking in your anti-aging cream. In fact, it's hard to find lotions, cosmetics, sun block, and many other beauty products that don't contain this chemical. What is this harmful chemical? It is actually a group of chemicals called parabens. Included in the manufacturing of anti-aging cream because of their benefits as a preservative, there are a couple of concerns connected with parabens. **Not only are parabens toxic, but they can also actually speed up the aging process in the skin.**

Parabens are a group of chemicals included in the manufacturing of anti-aging cream and other beauty products because they **help to inhibit bacteria growth in the product, thus lengthening their shelf life.** If the list of ingredients on your anti-aging cream includes the terms propylparaben, methylparaben, ethylparaben, or butylparaben, your cream has parabens. **Although these chemicals do have a preservative effect on the anti-aging cream, they have the opposite effect on your skin and body causing premature aging and sagging of your skin.**

The first concern with parabens is that they are absorbed by the skin into the body. For instance, when you apply an anti-aging product containing parabens, the parabens are absorbed into your skin and accumulate in your body tissues. The breast tissue is of most concern since the majority of the people using cosmetics and anti-aging products are women. Although no firm connections have been made, an article in the May 2004 issue of the *Journal of Applied Toxicology* indicates parabens were found in each of 20 samples taken from human breast tumors. This is especially alarming since the parabens can mimic estrogen, a hormone that drives the growth of breast tumors in humans as stated in the article.

Another reason you should be concerned if parabens are included in your anti-aging product is that parabens can react with the sun's UV rays in a way that may actually accelerate the aging process of skin. According to research conducted at the Kyoto Prefectural University of Medicine skin treated with parabens, methylparaben specifically, showed a 16 percent increase in skin cell fatality when the skin was exposed to a regulated amount of ultraviolet rays as opposed to untreated skin. Researchers believe this increase in the rate of cell death may contribute to wrinkles, dark spots and diminished skin tone, thus making the skin look older. Think about that next time you use your anti-aging cream.

You buy and use an anti-aging product in hopes it will make you look younger. This may not always be the case for products including parabens as preservatives. Always check the list of ingredients on your anti-aging product to make sure there are no dangerous chemicals lurking there.

Judging by the number of anti aging skin products that contain parabens, you'd have to think they contribute in a big way in protecting the skin from aging.

What are parabens?

Parabens are a large collection of synthetic chemical products found in most skin care and cosmetic products including moisturizers, shampoos, foundation, face powder, exfoliants, baby products... There are thousands of skin care products that contain parabens, the list is endless.

The reason parabens are put into skin care products is they have an antibacterial effect and act as a preservative.

So what? There are two problems.

The first and most serious one is the potential for parabens to be absorbed by the skin into the bloodstream from where they can lodge in our fatty tissues. As women are the main users of these products, the breast tissue is of particular concern.

Parabens mimic the hormone estrogen and can be absorbed by the breast tissue. In fact parabens, in their unconverted form, have been found in breast tumours.

What's the other problem with parabens?

Anti aging products are bought by both men and women in the hope of preserving the appearance of their skin. The problem is that some parabens can react to the UV rays in sunlight to produce a substance that actually accelerates aging.

No problems, you may think, I'll just wear a sun block.

Good idea, you should be wearing one anyway. Just check the label though because... guess what? That's right, parabens are even found in certain sun protection products.

How can I tell if there are parabens in the products I use?

It's very difficult because they go under so many different names! Some of the more recognisable ones are: Ethylparaben, Methylparaben, Isobutylparaben, Aseptofom Butyl and Benzoic acid. Parabens have many synonyms so without knowing all the names, which is virtually impossible, reading the label will only add to further confusion.

It's fairly safe to say if you see several long names you can't pronounce on the back of a product, there's a paraben lurking somewhere inside! Over 90% of skin care products, contain these chemicals. They are there because they are cheap and until recently, considered relatively safe.

The FDA has requested cosmetic companies to test the various ingredients they use to manufacture their products (May 2005). While they are to be commended for this, the process is laboriously slow and ongoing.

Risk Posed by Toxics in Cosmetics Could Leave Unwary Investors with Black Eye

Tuesday February 20, 10:00 am ET

Investor Environmental Health Network (IEHN), Washington, D.C

Growing Regulatory, Consumer Pressure Pose Major Challenges for Cosmetics Industry, Retailers; Bed, Bath & Beyond and CVS Face Related 2007 Proxy Votes

Things could get ugly for investors who ignore glaring health risks in the cosmetics industry, warns a new report from the Investor Environmental Health Network (IEHN), which represents 20 investment organizations with \$22 billion in assets under management. A powerful convergence of forces -- shareholder resolutions, health risk information, European and U.S. regulatory changes and growing consumer pressure -- could drive sweeping changes in the U.S. personal care and cosmetics industry, with significant implications for investors, according to IEHN.

The release of the IEHN report caps a flurry of developments in recent weeks exposing the risks associated with toxic-bearing cosmetics and the retailers who provide them to the public. Investors are now weighing two related shareholder resolutions at CVS and Bed, Bath & Beyond. On February 8, 2007, Innovest Strategic Value Advisors, a financial research firm, released a report that the risk of "toxic lockouts" could result in a loss of market share and loss of market access for four major industries, including cosmetics. On January 25, 2007, it was announced that 500 cosmetics companies -- including The Body Shop and Burt's Bees -- had signed the Compact for Safe Cosmetics, a pledge to eliminate toxic ingredients from their products nationwide.

Entitled "Beneath the Skin: Hidden Liabilities, Market Risk and Drivers of Change in the Cosmetics and Personal Care Products Industry," the new IEHN report describes a ticking time bomb scenario of a largely self-policed industry in which regulatory action by the U.S. Food and Drug Administration (FDA) typically is triggered only by reporting from the companies themselves. "The result is a system that permits significant consumer exposure to occur before sufficiently rigorous safety testing is conducted -- ultimately, a game of roulette which places consumers, manufacturers and investors at risk," said Sanford Lewis, an attorney specializing in corporate accountability and one of the report's authors.

The U.S. cosmetics industry, dominated by 10 large companies, accounts for the use of nearly one in seven of the 75,000 chemicals registered for use in the United States. However, the FDA bans or restricts only 9 of those substances.

Common ingredients found in U.S. personal-care products include phthalates, which have been linked to malformed or underdeveloped reproductive organs in males; formaldehyde, classified as a carcinogen; and parabens, endocrine-active preservatives that have been found in breast tumors. Many ingredients are exempt from labeling requirements because the product formulas are protected as proprietary, the report notes.

Scientists and consumers also have expressed concern that the industry's use of nanoparticles, which involve the manipulation of microscopic particles, may allow them to penetrate into the bloodstream & lymph system & damage tissue.

The weak U.S. regulatory structure also limits product marketability in the 457-million person European market. In 2005, the European Union banned more than 1,000 chemicals for use in cosmetics, the report notes. Closer to home, both California, the world's sixth-largest economy, and Canada have tightened their regulations of personal-care products.

A total of 500 manufacturers, distributors and retailers have signed the Compact for Safe Cosmetics, a pledge to phase out hazardous materials in cosmetics and personal-care products within three years, and to meet the tough new European standards worldwide, the report notes. Unfortunately, many of the industry's largest companies, including Avon, Estee Lauder, and Procter & Gamble, have refused to take the same common-sense step. Instead, the cosmetics industry has begun touting its Consumer Commitment Code, which appears to do little more than defend the status quo: the industry's self-policed ingredient review process and the inadequate "remedy" of voluntary reporting to the FDA.

The code "appears to do little if anything to encourage cosmetics companies to eliminate the array of substances of concern for long-term health issues such as reproductive, cancer and endocrine impacts that are being flagged in the scientific literature," the IEHN report notes.

"Companies that proactively reformulate their products based upon emerging concerns about chemical safety will enhance their competitive positioning and position themselves to avoid future regulatory costs," said Karen Shapiro, shareholder advocacy associate at Domini Social Investments LLC, which has introduced resolutions in the past at Avon Products. "They may also maintain a competitive edge in global markets."

The authors of "Beneath the Skin" recommend that investors in cosmetics industry companies: compare and benchmark cosmetics and personal care companies on their performance on these issues; demand greater disclosure; monitor emerging scientific data; and anticipate tighter regulation and changing markets.

"A cosmetics company that explores less toxic reformulations, embraces a greater degree of pre-market testing for health impacts, and expands its positioning in the use of natural ingredients stands to gain," the IEHN report concludes.