

TORONTO STAR

Oct. 8, 2005

Danger in that skin lotion

by Cameron Smith

How great an assault can our bodies take from the vile concoctions mixed in with our food, cosmetics and garden supplies before they collapse, especially if the concoctions are added on top of bad air, pollution that delivers everything from mercury to organochlorines and nasty levels of solar radiation?

When does the cumulative impact overwhelm our immune systems?

These are questions no one can answer, but it stands to reason that immune systems have their limits. The marvel is that human bodies are so resilient.

However, the assault can be prodigious and involve a wide range of products, as a guide to toxins in home and garden products shows.

It's published by the Labour Environmental Alliance Society in Vancouver as The Cancer Smart Consumer Guide and is available for \$12, including postage. Details on ordering it are available at <http://www.leas.ca>.

What grabbed my attention in the guide are the preservatives called parabens. There are several kinds: methyl-, ethyl-, n-propyl-, isopropyl, n-butyl- and benzylparaben.

The guide notes that a British researcher has discovered parabens in breast tumours. When I looked up the research, I found that there's controversy over how parabens get into the breast tumours, as well as whether they can be a direct cause of cancer. There's also research that shows parabens can lower testosterone levels and sperm counts in male rats.

So, I checked my shampoo, hair conditioner and lotion. Sure enough, they contained both methylparaben and propylparaben. I bought them from a health food store thinking they'd be trouble-free.

As the research on sperm and testosterone points out, "Parabens are the most commonly used preservatives in cosmetics, toiletries,

pharmaceuticals and foods." ("Effects of propyl paraben on the male reproductive system," S. Oishi, Food and Chemical Toxicology, vol. 40 (2002), pages 1807-1813)

The startling thing about the study on breast tumours was that parabens were found intact in the tumours. ("Concentrations of parabens in human breast tumours," P. D. Darbre and others, Journal of Applied Toxicology, vol. 24 (2004) pages 5-13)

Lotions are designed to be absorbed by the skin. Apparently, this means the parabens, once absorbed, can travel without change around the body.

All the research papers noted that parabens act like small doses of estrogen. And estrogen has been linked to breast cancer and reproductive deformities in fetuses. Among other characteristics, they can bind to estrogen receptors. In other words, they are hormone disruptors.

That means there's no safe level of parabens if you want to prevent them from acting as hormones. Their danger as disruptors would be determined not by dosage, but by timing: by activating or contributing to cell development at an inappropriate time, or in an inappropriate way. And this can be done at incredibly low dosages.

My next step was to check the websites of the major cosmetic firms that advertise how much they care about environmental issues. The only firm I could find that had anything to say about parabens was Avalon Organics, which is not a brand I have used.

"Although there is no definitive consensus on the danger of parabens," the company's website says, "Avalon has adopted a precautionary principle approach, and has committed to removing parabens from all our formulations. ..." Good for Avalon.

The CancerSmart guide should be required reading in every home. I'm glad I read it.

This was the response from Avalon about which preservatives they do use.

Thank you for your interest in Avalon Natural Products and for your inquiry regarding the use of preservatives in our health and beauty care products.

For complete protection from unhealthy contaminants, we blend the appropriate combination of a variety of naturally derived preservatives at safe and sparing levels - including benzyl alcohol, phenoxyethanol or a patent pending blend of natural ingredients that inhibit microbial growth.

Here are the Toxicology Reports on the preservatives:

Benzyl Alcohol: Harmful if swallowed, inhaled or absorbed through the skin. Severe irritant for eyes, skin and respiratory system

Phenoxyethanol: Harmful if swallowed, inhaled or absorbed through the skin. May cause reproductive defects. Severe eye and skin irritant.



Sensé beautiful science

USANA is the first company in the world to introduce an entire line of “self-preserving” formulas with a full two-year shelf life. There are other products, however, that claim to be “preservative-free” which fall into the following categories:

- a) Truly Preservative-Free – Inconvenient to use and potentially unsafe. Like a jar of mayonnaise, these products require refrigeration, have short shelf lives, and require careful handling.
- b) Botanical Extract Systems – Do not require refrigeration, but have short shelf lives due to their weak action. In our opinion, such products are “under-preserved” by providing some protection but may not provide sufficient broad-spectrum protection from all types of contaminants. USANA detected *Staphylococcus aureus* contamination in

one leading brand which claimed to be preservative-free.

c) “Paraben-Free” – These products usually are free of paraben preservatives, but use other chemical preservatives that are less well known by consumers, such as sorbic acid.

U.S. PATENT-PENDING, SELF-PRESERVING FORMULAS

After nearly ten years of research, USANA found the answer in a unique, U.S. patent-pending blend of botanicals, antioxidants, and active ingredients that keep every Sensé product fresh without the need for parabens. It truly is the next generation of natural skin and body care.

Sensé products are not formulated with chemical preservatives, instead employing self-preserving ingredients to ensure pure, fresh product. And unlike many products on the market today, each Sensé product has passed extensive laboratory testing, demonstrating its ability to neutralize potential microbial contamination.

Cosmetic preservatives are those chemicals added with no other function in the formula other than to keep the product from spoiling. Because many personal care products today are water-based, they provide an inviting medium for microbial growth unless precautions are taken. Spoilage occurs when bacteria, moulds, yeast or other microorganisms find their way into the product and spread unchecked.

With self-preserving technology all of the functional ingredients of a formula as well as the manufacturing process and the packaging are combined using a patent-pending technology to become the preservative system. In other words, “the product is the preservative.”

Exclusive Technologies

In Sensé’s “self-preserving” line of skin care products there are no biocides added exclusively to preserve the product. There are six “pillars” of self-preserving technology:

1. Water Activity
2. pH Control
3. Active Ingredients
4. Appropriate Packaging
5. Clean Manufacturing
6. Patent-Pending Liquid Crystals

Liana Nishi
Liana@usana.com
604.708.6000