



## Understanding Parabens

Parabens are a group of broad-spectrum preservatives (meaning they kill a variety of microbes) used to prevent the growth of harmful micro-organisms, especially molds and yeast in thousands of personal care products from shampoo to personal lubricants. Parabens have been used extensively for over 50 years and have been researched thoroughly. They have been recognized as safe by the U.S. Food & Drug Administration and the Cosmetic, Toiletry & Fragrance Association

Parabens are used in very small concentrations causing absolutely no reason for concern for most people. It has been found that some people with extremely sensitive skin may develop a mild reaction in products that are not rinsed off such as lotions. Yet it is exceptionally rare to have a reaction to products that are rinsed off, such as shampoos or body washes.

### Is there a Link to Cancer?

You may have heard reports that you should avoid parabens at all costs because of increased risk of cancer. Much of the publicity is due to a small study conducted at the University of Reading in the United Kingdom, in which scientists found traces of parabens in tissue taken from women with breast cancer. The 2004 January/February edition of the Journal of Applied Toxicology published the results. However, this study had some problems: 1. It was small (involving samples from only 20 women), 2. There were no controls (normal breast tissue was not included for comparison), 3. No other parts of the body were studied, 4. The source of the parabens was not identified. Did they come from antiperspirants, other personal care products, or possibly a household source?

The bottom line is this study did not prove a cause and effect relationship between parabens and cancer.

### Cosmetic, Toiletry & Fragrance Association

The following is an excerpt from the CTFA in a report on the use of parabens, published on 8/01/96 in the Journal of the American College of Toxicology. *"Parabens are esters of p-hydroxybenzoic acid (PHBA) and are used as preservatives in cosmetic formulations. Data obtained from chronic administration studies indicate that conclusion: Parabens do not accumulate in the body. Acute chronic and sub chronic toxicity studies in animals indicate that Parabens are practically nontoxic by various routes of administration. Co-carcinogenesis studies on Propyl and Methylparaben were negative."*

### Alternatives

Because of the media hype about parabens many consumers are demanding "paraben free" products. What do you do? Our first suggestion is to educate. (See Understanding 'All Natural' article) If you have a client that persists, you can let them know that there are other natural substances that offer some antibacterial benefits.

**Essential Oils** - While it is true that some essential oils have antibacterial and anti-fungal properties, the quantity needed to effectively preserve a water containing product would be at unsafe levels. Care needs to be taken when using essential oils.

**Potassium Sorbate** - While potassium sorbate can effectively preserve against mold and yeast, it is not useful for protecting from bacteria. It is not at all effective in products with a pH over 6, which most lotions are. While potassium sorbate is found in nature, any available today would have been synthetically made so it is not "all natural".

**Vitamins** - A, C and E can extend the shelf life of products by preventing oxidation and by slowing the growth of certain bacteria. Vitamin E in particular is great for keeping oil from going rancid. But, these vitamins are not effective as broad-spectrum preservatives and cannot replace other preservatives in all products.

### Sensitive to Market Needs

Innovative Body Science uses "all natural" products whenever possible. We use safe preservatives very sparingly to keep certain types of products free of bacteria, mold and yeast.

The concentration of parabens used in cosmetic products is not regulated in the USA. However, the European Union (EU) and Japan limit the concentration of parabens in cosmetic products to 1% or less. The total concentration of parabens in Innovative products never exceeds 0.27%.

Although parabens are safe, we understand that there is a lot of misinformation in the market and thus a demand for paraben free products. Because we support our clients, Innovative will be offering all our products in a paraben free version beginning January 2007.

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