



#### **Parabens**

Parabens are man-made chemicals often used in small amounts as preservatives in cosmetics, pharmaceuticals, foods, and beverages. Common parabens are methylparaben, ethylparaben, propylparaben, and butylparaben. Often more than one paraben is used in a single product.

# **How People Are Exposed to Parabens**

People can be exposed to parabens through touching, swallowing, or eating products that contain parabens. Many products, such as makeup, moisturizers, hair-care products, and shaving creams, contain parabens. Parabens in these products are absorbed through the skin. Parabens also can enter the body when pharmaceuticals, foods, and drinks containing parabens are swallowed or eaten. Parabens that enter the body are quickly excreted.

### **How Parabens Affect People's Health**

Human health effects from environmental exposure to low levels of parabens are unknown. In 2006, the industry-led Cosmetic Ingredient Review (CIR), in a partnership with the U.S. Food and Drug Administration (FDA), determined that there was no need to change CIR's original conclusion from 1984 that parabens are safe for use in cosmetics. The FDA allows single or multiple parabens to be added to food or food packaging as antimicrobials to prevent food spoilage.

#### Levels of Parabens in the U.S. Population

Centers for Disease Control and Prevention scientists measured parabens in the urine of more than 2,548 participants aged six years and older who took part in the National Health and Nutrition Examination Survey (NHANES) during 2005–2006. By measuring these chemicals in urine, scientists can estimate the amount of parabens that has entered people's bodies. CDC scientists found Methylparaben and propylparaben in the urine of most of the people tested, indicating widespread exposure to these parabens in the U.S. population.

- In adults younger than age 60, non-Hispanic blacks had higher levels of methyl paraben than non-Hispanic whites.
- Females had several-fold higher concentrations of methylparaben and propylparabens than males, which likely reflect the greater use of products containing parabens.

Finding a measurable amount of parabens in urine does not mean that they cause an adverse health effect. Biomonitoring studies on levels of parabens provide physicians and public health officials with reference values so that they can determine whether people have been exposed to higher levels of parabens than are found in the general population. Biomonitoring data can also help scientists plan and conduct research on exposure and health effects.

#### **For More Information**

- Food and Drug Administration
  Parabens
  <a href="http://www.fda.gov/Cosmetics/ProductandIngredientSafety/SelectedCosmeticIngredients/ucm128042.htm">http://www.fda.gov/Cosmetics/ProductandIngredientSafety/SelectedCosmeticIngredients/ucm128042.htm</a>
- National Toxicology Program
  Butylparaben
  <a href="http://ntp.niehs.nih.gov/ntp/htdocs/Chem\_Background/ExSumPdf/Butylparaben.pdf">http://ntp.niehs.nih.gov/ntp/htdocs/Chem\_Background/ExSumPdf/Butylparaben.pdf</a>

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The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.