

Safe, Not Sorry, Hair: The Case for Nontoxic Shampoos, Conditioners and Colors

by Maureen Ryan

Marianne Kapfer, a librarian in Washington, D.C., likes a natural look. She doesn't wear much makeup but loves to indulge in a good shampoo and conditioner. When she started reading labels more closely, however, "I realized that my 'natural' shampoo wasn't so natural," Marianne says. And that's not all. Due to labeling loopholes, many "natural" and "organic" personal-care products in the United States contain hazardous chemicals, some of which, at high exposures, have been shown to cause cancer, birth defects, damage to nervous and reproductive systems and liver damage in lab animals.

According to "Skin Deep," a 2004 study and ranking of 7,500 cosmetic products published by the Environmental Working Group (EWG), 100 percent of shampoos tested contained ingredients that have not been assessed for safety by either the Cosmetic Industry Review panel (an industry body) or the U.S. Food and Drug Administration (FDA), which is charged with regulating cosmetic ingredients. Other hair-raising facts:

*69 percent of hair-dye products may pose cancer risks

*76 percent of conditioners contain ingredients that are allergens

*93 percent of shampoos possibly contain harmful impurities linked to cancer or other health problems.

"As an organization, we urge consumers to take action and reduce their exposure to industrial chemicals," says Timothy Kropp, Ph.D., a senior scientist in toxicology with the EWG. One simple way to do this: Read labels and choose hair-care products that are free of the following Top Four hazardous chemicals (for *The Green Guide's* full "Dirty Dozen" list, see Resources, below).

Top Four Ingredients to Avoid

1. Phthalates: These chemicals get covered up on labels by the general term "fragrance," which the FDA permits to protect "trade secrets." But they're readily absorbed by our fingernails, skin and lungs. This July, the U.S. Centers for Disease Control and Prevention reported finding the metabolized forms of dibutyl phthalates, used in nail polish and synthetic fragrance, in every person tested in their national "body burden" study. Studies have found that phthalates can lead to liver cancer and birth defects in lab animals, and now research into the effects on humans is beginning to emerge.

For example, a study from the University of Minnesota,

published in the May 2005 *Environmental Health Perspectives*, found a connection between phthalates and genital abnormalities in baby boys. Researchers measured the level of phthalates in the urine of 85 pregnant women and found that mothers with high levels of phthalates gave birth to boys with one or more developmental issues, including problems such as smaller penises and scrotums or less developed testicles. Although Dr. Christine Ternand, one of the study's authors and an assistant professor of clinical medicine at the University of Minnesota, said it was "premature" to instruct women to avoid these chemicals altogether, she added, "If I were pregnant or trying to get pregnant, I would reduce my exposure—and my fetus's exposure—to products containing phthalates."

To reduce exposures to phthalates, steer clear of shampoos and conditioners listing "fragrance" as an ingredient. Although some manufacturers have recently declared that they've removed phthalates from their products (see below), in the absence of specific labeling it remains unclear to what extent, and in which products, this is actually the case. Instead, choose products whose labels list only non-synthetic fragancing ingredients, such as essential oils of lavender, mint or verbena. And before trying any new cosmetic product, do a touch-and-sniff test, since natural oils can cause irritation or allergic reactions in some people.

2. Parabens (methyl-, propyl-, ethyl- and butyl):

Some studies have shown that parabens mimic estrogen in rodents; the chemicals also have been shown to stimulate growth of human breast-cancer cells in the lab.

3. Coal Tar: In 1993, the FDA issued a warning to consumers about coal tar being a possible cancer risk. Coal tar appears in many hair dyes and strong dandruff and psoriasis shampoos, but the FDA failed to ban it even though studies have linked it to cancer in lab animals. The EWG found that 71 hair-dye products contained ingredients derived from coal tar. John Masters of John Masters Organics, a New York City hair stylist for 30 years, says that he shuns the use of coal tars in his hair dyes for his own safety and the safety of his clients and staff. "The skin absorbs 70 percent of what we put on it. It's important that people know what they're applying and taking into their body," Masters says.

4. Sodium Lauryl Sulfate (SLS) and Sodium Laureth Sulfate (SLES) are found in some shampoos and conditioners and may cause hair loss and scalp irritation.

Companies and Governments Making Healthy Changes

If you live in Europe, you're somewhat better protected than you are here in the States. In September 2004, a European Union ruling went into effect banning hundreds of carcinogens and reproductive toxins from all personal-

care products on the European market. To put that in perspective, in its 67-year history of monitoring cosmetics, the FDA has banned only nine chemicals.

In response to the EU ruling, the Campaign for Safe Cosmetics is urging American companies to sign its Compact for Safe Cosmetics pledge to stop using dangerous chemicals. More than 150 companies, including Aubrey, Avalon, Burt's Bees and Terressentials, have signed. But as of July 2005, several mainstream companies had not. "We continue to be surprised by the lack of willingness on the part of major conventional cosmetics companies, like Estée Lauder, L'Oréal, Revlon, Avon, Unilever and Procter & Gamble, to make the commitment," says Janet Nudelman, coordinator for the Campaign for Safe Cosmetics.

Complicating matters is an ongoing debate as to what constitutes a health risk. A May 2005 *Journal of the American Medical Association (JAMA)* review of 79 studies did not find "strong evidence" of a "marked increase" in cancer among personal hair-dye users, even though risk of some cancers was significantly, though slightly, increased. But according to Tongzhang Zheng, M.D., head of the Division of Environmental Health Sciences at Yale University and an author of a 2002 hair-dye study examined by the *JAMA* reviewers, "The report ignored important information. Because [this report] didn't have original data from individual studies, the analyses had to select some results from each published paper," he says. The *JAMA* writers chose to include studies based on systematic criteria (such as the way the study was designed). As a result, however, the analysis left out some related research, such as a study Dr. Zheng published in the *American Journal of Epidemiology* in 2004. "In [that] report," he says, "we found that the risk of non-Hodgkin's lymphoma was doubled for those using darker permanent hair-coloring products for more than 25 years."

Until scientists agree as to what's risky (which may not happen soon), consumers can take the simple step of avoiding potentially dangerous ingredients. Below are some products that are in agreement with the EWG's safety concerns and that avoid chemicals on *The Green Guide's* Dirty Dozen list. "It's great to know that there are safe options out there," says Kapfer. "I don't have to compromise my health to look good."

Safe Shampoos

Not your traditional shampoo, Terressentials Organic Pure Earth Hair Wash in Fragrance Free, Cool Mint and three other varieties contains no synthetic ingredients or detergents. Made from Moroccan clay, this unique, non-lathering mud wash was ranked number one by the EWG. (www.terressentials.com, 8 oz., \$10.75)

If you want to ditch the bottle, you can try a bar of Burt's

Bees Rosemary Mint Shampoo. It contains oat protein, peppermint oil, nettle leaf, rosemary leaf, avocado oil and coconut oil. Plus the smell is totally invigorating.
(www.burtsbees.com, 3.5 oz., \$6)

The phthalate- and paraben-free Rosa Mosqueta shampoo from Aubrey Organics is great for color-treated hair. Added bonus: The rosy scent lasts all day long.
(www.aubrey-organics.com, 11 oz., \$9.50)

Conditioners

The EWG ranked Weleda's Rosemary Phyto conditioner number three, and it's great for treating brittle split ends.
(usa.weleda.com, 8 oz., \$10)

All of Avalon Organics' products are phthalate- and paraben-free, but the Lemon Clarifying Conditioner is one of the best. It contains 100 percent vegetarian ingredients and brings out your hair's natural highlights.
(www.avalonorganics.com, 14 oz., \$8)

A great product that controls tangles and flyaways is Aubrey Organics' Green Tea Finishing Cream Rinse.
(www.aubrey-organics.com, 11 oz., \$9.50)

Hair Dyes

According to David Steinman, M.S., author of the Safe Shopper's Bible, the easiest way to determine if your hair dye is dangerous is to check for a "warning label" instructing you to avoid the eyebrow area. This means that the product likely contains dyes that could potentially cause cancer, Steinman says. He adds that if you're pregnant or trying to conceive, "This is not the time to be dying your hair." As a general rule, avoid permanent dyes and caustic ammonia, which can burn scalp and eyes. Semi- or demi-permanent colors are gentler.

Safer Options

Aubrey Organics' henna-based dye Color Me Natural is free of coal tar. (www.aubrey-organics.com, 4 oz., \$11.95)

Light Mountain's 100 percent henna-based dye works wonders covering up gray. (7 oz., \$11)

If you'd rather hit the salon, John Masters Organic Salon, in New York City, offers clay and herbal-based highlights that are 100 percent ammonia and coal-tar free and contain very little hydrogen peroxide.
(www.johnmasters.com, herbal dye starts at \$90; clay highlights start at \$125)

Or try Aveda's very gentle, semi-permanent color-enhancing shampoos and conditioners. (www.aveda.com,

for prices call 866-823-1425)

Resources

For what to avoid, print out a wallet-size shoppers' card of *The Green Guide's* Dirty Dozen list of chemicals.

*www.thegreenguide.com/gg/pdf/dirtydozenpalm.pdf

*Also see www.organicconsumers.org

For more product recommendations:

*"[Beauty Secrets](#)," Green Guide #94 and [Shampoo Product Report](#)

*The EWG's 2004 study "Skin Deep" and searchable product database (www.ewg.org)

*The Campaign for Safe Cosmetics (www.safecosmetics.org)

*Breast Cancer Action's www.thinkbeforeyoupink.org/Pages/Resources.html

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