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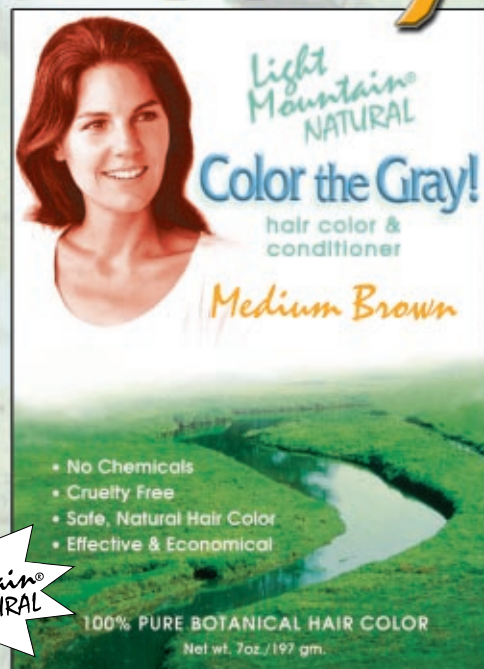
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* Source: Doctors' Prescription for Healthy Living Newsletter



The Natural, Non-Toxic Coloring & Conditioning Alternative

**NON-TOXIC, NON-CARCINOGENIC LIGHT MOUNTAIN® HAIR COLOR
PROTECTS HAIR AND ENHANCES COLOR WITHOUT CHEMICALS**

Women worldwide have avidly sought out Light Mountain® to color, highlight and condition their hair. Light Mountain® brings women 100% pure botanical hair colors with no additives and no artificial ingredients. Its conditioning effects last 30% longer than most hair conditioners.



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Hair Dyes

TO DIE
FOR



by David Steinman

TODAY, ABOUT 40 PERCENT of American women, some 50 million, age 18 to 60, use hair dyes monthly or bimonthly, often for decades. By the 1990s, the world market reached some two-and-a-half billion dollars annually, with United States sales of nearly one billion.

The Food and Drug Administration says that an exemption to the 1938 Food, Drug and Cosmetic Act leaves their agency powerless to effectively regulate coal-tar dyes (hair colorants' main ingredients). When consumer activists speak up and provide factual information, the hair dye industry sends out its "enforcers" to threaten legal action and otherwise attempt to silence dissenting views.

Don't worry. It is not your fault. You should have had more information.

We will show you a better substitute, and you won't miss your pretty petrochemical poisons at all.

HAIR DYES: A CLOSER LOOK

The products that appear to pose the greatest risk are known as permanent and semipermanent hair dye products. Most of these contain a wide range of petrochemical hair colorants, such as 4-amino-2-hydroxytoluene. When all the hype is removed from hair dye products, a typical permanent and semipermanent hair color product contains up to 15 different dyes combined in a detergent or ammoniacal solution that also contains hydrogen peroxide; solvents, such as polyethylene glycol (PEG); sudsing alcohols, such as cetareth and laureth compounds, diethanolamine (DEA) and triethanolamine (TEA) that contain or produce carcinogenic contaminants; and preservatives that release small amounts of carcinogenic formaldehyde.

The coloring agents used in permanent and semipermanent hair colors belong to a family of petroleum-derived chemicals known generally as coal-tar dyes, specifically, as phenylenediamines and aminophenols. ➔ ➔ ➔

Isn't it time that consumers received an advisory warning about the hair dyes they are using? A whole class of hair dye products have been known to cause experimental and probably some human cancers for many decades; yet, neither the industry nor the watchdog agency that regulates hair dyes appears eager to mention these risks. Indeed, the hair dye industry continually cites studies they say demonstrate the safety of their products but that themselves show small increased risks.

**Hair Dyes
to Die For**
continued

It is important that women keep these names in mind because they signify two families of commonly used and dangerous chemicals. Two of the most widely used phenylenediamine dyes, 2,4-diaminotoluene (2,4-DAT) and 2,4-diaminoanisole (2,4-DAA), were removed from hair dye products in 1971 and 1978, respectively, after it was discovered they were carcinogenic in rodents. Many other phenylenediamine dyes still are used in permanent and semipermanent hair coloring products.

My coauthor, Sam Epstein, and I noted in *The Breast Cancer Prevention Program* that even though only some 3,000 subjects with breast cancer had been studied in the nine major studies that examined the association between hair dye use and breast cancer up to that time, if they had been well controlled, that number would have been sufficient. As it is, the findings are controversial. Despite limitations, five of nine major studies claimed to have found an association between hair dye use and breast cancer.

Women who start using hair dyes at 20 have over twice the risk as women who start later in life.

The first study, in 1976, looking at breast cancer and hair dye use reported that of 100 consecutive breast cancer patients seen in a clinical practice in New York, 87 had been long-term users of hair coloring agents.

A 1977 United Kingdom study, based on 191 breast cancer subjects, found an increased risk among hair dye users over age 50, compared to nonusers, whose first pregnancy had occurred at 30 years of age or older.

A 1979 U.S. study, based on 129 breast cancer patients, found a significant relationship between cumulative hair dye use (number of years times frequency per year) and breast cancer. The risk was greater for women with a "low, natural risk for breast cancer." Women most vulnerable were in the 50- to 79-year-old age group, suggesting that the latency period between the damage begun by hair dyes and the result can be lengthy.

A second 1979 U.S. study found an excess number of breast cancers among women who

had used hair dyes for at least 21 years before the onset of their cancers.

A 1980 study, looking at 118 women with breast cancer, found that women who dyed their hair to change its color, in contrast to women who dyed their hair to mask grayness, were at three-fold risk for breast cancer. These risks were even greater for women with a past history of benign breast disease, and for women aged 40 to 49. These effects were not explained by past pregnancy, age at first pregnancy, history of artificial menopause, or age at menarche.

I suspect that these studies were more likely to find breast cancer risks during this period because of the makeup of the dyes that were being used, including two that have since been voluntarily removed.

The association between hair dye use and breast cancer is supported by evidence on excess breast cancers among cosmetologists and hairdressers. It could be argued that cosmetologists, who wear protective clothing and gloves, are less exposed than users who apply these petrochemical greenhouse residue chemicals to their scalps. Also, there is experimental evidence that a current dye used in many products causes breast cancer when it is coupled with hydrogen peroxide. Thus, questions about the safety of such products persist.

Most recently, a joint American Cancer Society (ACS)-Food and Drug Administration (FDA) study, which examined the relationship of permanent hair dye use and a wide range of cancers, including those of the breast, found a four-fold increase in several rare cancers. Although alleging that hair dyes pose no breast cancer risk, it did recommend "removal of carcinogens from hair dyes and appropriate labeling of hair coloring products."

In a 2005 study in the *Journal of the American Medical Association*, researchers examined the results of some 79 epidemiological studies from 1966 through January 2005. The breast cancer risk for hair dye users was increased by 6 percent. The risk for bladder cancer was barely above normal; the risk for hematopoietic (blood) cancers was 15 percent. Other cancers were examined by only one or two studies, "of which the pooled or single relative risk was elevated for brain cancer, ovarian cancer, and cancer of the salivary glands."

Hair dye use has been clearly incriminated as

a cause of relatively commoner cancers, including non-Hodgkin's lymphoma (the cancer from which Jacqueline Kennedy died), multiple myeloma, and leukemia. There is also strong evidence that hairdressers have higher rates of bladder cancer.

In the January-February 2005 issue of *Public Health Reports*, researchers at Marshfield Clinic Cancer Center, Marshfield, Wisconsin, pooled data from epidemiological studies and examined the influence of hair dye type, color, and study design; they found "that personal use of hair dye products increases bladder cancer risk by 22 percent to 50 percent vs. non-use." They concluded, "The available epidemiological data suggest an association between personal use of hair dye products and increased risk of bladder cancer."

THE HENNA CONNECTION

For women and men who are seeking alternatives to petrochemical hair dyes, especially to cover gray, one company has nearly perfected the henna process for covering gray. Light Mountain® Natural Hair Color and Color the Gray! come in a wide range of color variations and to our knowledge is the only henna product available today that can entirely cover gray.

The Light Mountain line not only adds great color shading to hair, henna is also a terrific hair conditioner. Light Mountain comes to consumers from Twin Lakes, Wisconsin-based Lotus Brands, Inc.

"Imagine gorgeous reds, rich auburns, deep browns and ebony blacks. The Light Mountain Natural Kit is the perfect alternative to modern, complicated hair products. Simply mix, apply and

What to Do

- Put off using permanent and semipermanent hair coloring products as long as possible.
- Avoid the extremely dark shades of hair dye products—brunettes, blacks, and blues seem to pose highest risk.
- Use as infrequently as possible.
- If you must use a product with coal-tar dyes, try to choose one with the least number and lowest concentrations of any dyes. Although not perfect, the safest permanent and semipermanent hair dye products are likely to be found at health food stores and natural health centers. These represent the best and safest choices you can make.
- FDA Consumer magazine says, "Consumers might also want to consider using henna, which is largely plant-derived....These colorings don't fall into the coal-tar dye category and therefore any additive ingredients they contain have been tested for safety before marketing, in accordance with FDA requirements."



rinse out. There is no stripping, no peroxide and no chemicals. So simple and easy, all you have to add is water. Light Mountain is the first to offer henna in a complete kit that contains everything you need for a trouble-free, fool-proof henna. Plastic gloves are furnished to give you a helping hand during application, plus a plastic hat to hold everything in place while the henna works its magic. [It's a] 100 percent plant-based product. Cruelty-free. ■

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RESOURCES

Almost every health food store and natural market carries Light Mountain Natural Hair Color and Color the Gray! To find a store in your area, call Lotus Brands at (800) 824-6396; visit their website at www.lotusbrands.com or e-mail them at lotusbrands@lotuspress.com.

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