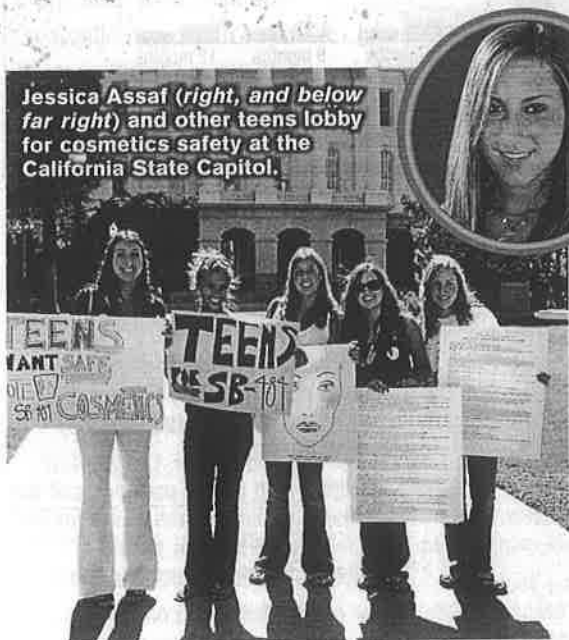


Cover UP?

A teen's effort to expose what's ugly about cosmetics

Jessica Assaf (right, and below far right) and other teens lobby for cosmetics safety at the California State Capitol.



and what they are doing to your body: “From deodorant to makeup to skincare, teens pile on a lot of products throughout the day. So we accumulate tons of chemicals.”

When Jessica learned that scientists have linked certain cosmetic ingredients to health risks, such as cancer, she was alarmed. Jessica decided to raise awareness about cosmetics safety. Her efforts even helped

change how her state government deals with the cosmetics industry.

Grab a bottle of hair gel or a tube of lipstick and read the ingredients label. Having trouble pronouncing the chemicals? Jessica Assaf, a 16-year-old from San Rafael, California, is suspicious of cosmetic chemicals that have complicated names. She wonders about what these ingredients do

NOT PRETTY

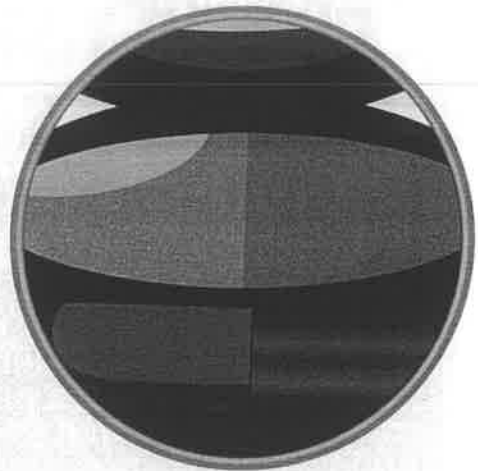
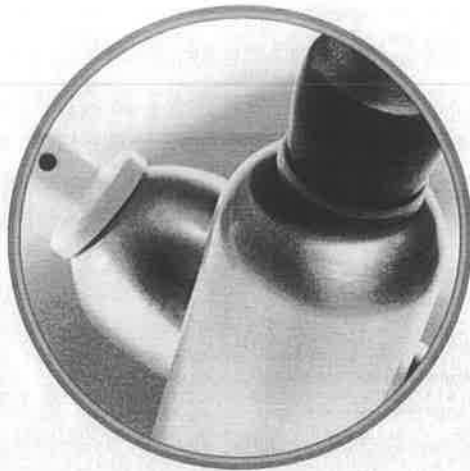
Jessica first learned about the possible risks of certain cosmetic chemicals when she started volunteering at a local grassroots organization called the Marin Cancer Project: Search for the Cause. By talking to scientists working with the organization, Jessica became aware of research showing the potential dangers of using certain cosmetic chemicals.

For example: Parabens, which are commonly used to preserve cosmetics, have been found in breast-cancer tumors. Other studies link phthalates (THAL-ates)—often used to give lotions a smooth texture—to liver and lung damage. Despite the findings, many scientists believe that more research is needed to confirm that these and other chemicals are unsafe for use in cosmetics. But for Jessica, the studies' results are enough for her to take precaution: She switched to using cosmetics made with natural ingredients, which she hopes might be safer.

BEAUTY STANDARDS

Jessica was also surprised to learn that the U.S. Food and Drug Administration (FDA) does not test cosmetic ingredients—except for color additives—before they reach the public. “Thousands of chemicals have not been tested by the FDA for safety,” she says.

Dr. Linda Katz, director of the FDA's Office of Cosmetics and Colors, says that is the case because the law requires that only colors be approved. “Manufacturers of cosmetics are responsible for ensuring that their



products and ingredients are safe before they market them," she says.

After a cosmetic product hits the stores, however, "if the FDA finds that it is not safe for consumers, we can take steps to have the product removed," says Katz.

webextra

To learn more about Teens for Safe Cosmetics, visit:
www.searchforthecause.org/tfsc_overview.html

MAKEOVER

Jessica believes that consumers deserve better cosmetics-safety standards. So she joined an activist group called Teens for Safe Cosmetics. The group, along with other like-minded organizations, worked with a California State Senator who had introduced legislation that requires cosmetics companies to report the use of any potentially hazardous ingredients to the California State Department of Health Services.

In the summer of 2005, Jessica's group met with state senators, as well as an aide to Governor Arnold Schwarzenegger, and lobbied their cause. "They were surprised to see teens so passionate about

the issue, telling them why the bill must pass," says

Jessica. Their efforts paid off. Governor Schwarzenegger signed the bill into state law.

Does the FDA think cosmetics-safety activists like Jessica are overreacting to inconclusive scientific findings? "You have to put it in perspective,"

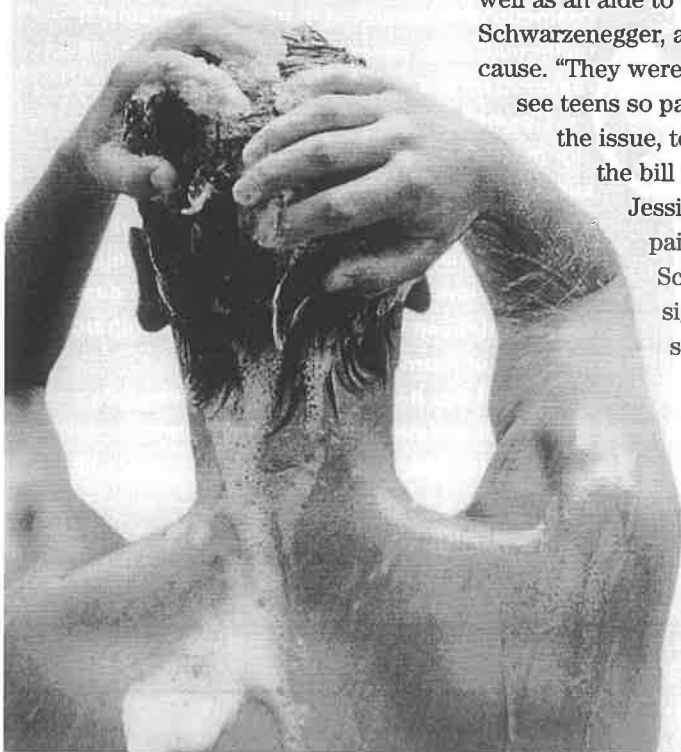
says Katz. "Cosmetic ingredients have been in the marketplace for years with few reports of any injury to consumers. The FDA continually monitors what is in the marketplace and has taken action on unsafe products."

Jessica argues: "It's what we don't know about the thousands of cosmetic ingredients that are being used that's so scary." To this end, Jessica has been working in the lab of Dr. Maggie Louie, a chemistry professor at Dominican University of California, to see how certain cosmetic chemicals stimulate breast-cancer cells. The preliminary lab results haven't been made public yet, but Jessica says that they only encourage her to continue with her mission. ❀

—Mona Chiang

debate it

Should you be concerned about the chemicals in your shampoo, lotion, makeup, and other cosmetic products? *Science World* invited one leader from the cosmetics industry and one from a cosmetics-safety advocacy group to debate the issue. Turn the page to read their arguments.



SHOULD YOU BE CONCERNED ABOUT THE CHEMICALS IN YOUR SHAMPOO, LOTION, MAKEUP, AND OTHER COSMETIC PRODUCTS?

Yes! Think of all the personal-care products that you used today. Did you use shampoo, deodorant, or makeup? On average, women use 12 products a day, and men use 6. But did you know that nearly 90 percent of the ingredients in these products have not been assessed for safety by the government or even by the cosmetics industry's own safety panel?

Are your products safe? Cosmetics companies say yes, but the proof is hard to find. Under current law, the U.S. Food and Drug Administration (FDA) cannot require companies to test personal care products for safety before they are sold. Instead, companies must ensure that a product is safe. But they do not have to tell anyone how they came to that conclusion, including the FDA.

Certain chemicals on the market have later been discovered to be dangerous. For example: Phthalates—chemicals commonly found in nail polish—have been associated with birth defects in boys. This finding led several manufacturers to reformulate their products. Also, some companies stopped using parabens, which are widely used as preservatives in cosmetics, after studies found the chemicals in breast tumors.

Companies use a wide variety of ingredients in personal-care products. They test some ingredients rigorously and others not as much—it's their choice. We deserve a transparent system that requires companies to prove that their products are safe before they go on store shelves and onto our bodies.

—Richard Wiles
Senior Vice President
Environmental Working Group

No! From grades to relationships, today's teens have a lot of things on their minds—but the safety of the cosmetics they use need not be one of their concerns. In fact, cosmetics and personal-care products are among the safest products on the market today.

Cosmetics companies employ and consult thousands of scientific experts and invest millions of dollars each year in cutting-edge technology and research to ensure the safety of their products. In labs across the country, experts are constantly testing ingredients and formulas for safety, quality, and performance.

Product safety is further ensured by guidelines set by the FDA. Federal law requires that every cosmetic product and its individual ingredients be substantiated for safety before it is marketed. It is a federal crime for a company to put an unsafe cosmetic product on the market. A company at fault could meet severe penalties such as product seizure, recalls, and bans.

Cosmetic products have been used safely for many years and their ingredients have been substantiated for safety by numerous independent expert bodies. Still, you may occasionally read something claiming that certain cosmetic ingredients are unsafe. Misinformation spreads easily today, and these claims are often made with no evidence of harm to humans.

If you have questions about the safety of your cosmetics, contact the manufacturer or the FDA for the most reliable information.

—Kathleen Dezio
Executive Vice President
Cosmetic, Toiletry, and
Fragrance Association



TEEN: DAVID CRAUSBY/ALAMY; LOTION: STOCKBYTE/GETTY IMAGES; SPRAY: PHOTODISC/GETTY IMAGES; MAKEUP: MEDIO IMAGES/GETTY IMAGES