

When we think of environmental hazards, we usually think of industrial pollution, water and sewage treatment problems and smog and soot from cars and trucks. It is difficult, and sometimes impossible, for us to control our immediate personal exposures to these problems — it takes concerted, organized efforts over long periods of time for communities to change public transportation, water and sewage treatment and energy production methods.

But we do have individual control over what we purchase for our families to eat, clean with, sit on, or put on their skin or hair. Most of us use products every day that contain ingredients that qualify as environmental hazards. This brochure can help you understand the potential health risks of some common products, identify less toxic alternatives for personal and household care and evaluate other products you find in the marketplace.

Over the past century, our world has become an increasingly chemical environment. Thousands of chemicals enter the commercial marketplace every year. There is no law in the U.S. requiring companies to test these many chemicals for their effects on human health. The U.S. Food and Drug Administration (FDA) only requires that food or drugs be tested for safety and nutritional value and does not require testing the chemicals found in nutritional supplements and the other products we use every day to clean and beautify our bodies and our homes.

Recent research is showing connections between long-term low-level exposures to chemicals and a variety of health risks. We do not know for sure whether or not they cause medical problems, nor do we know the impact of living with the cocktail of chemicals now found in household air and dust.

But better to be safe than sorry. We can all benefit from using products with less toxic chemicals. And people with chemical sensitivities, allergies and asthma absolutely must find less toxic products. Since what is available varies from store to store and day to day, please use this brochure for suggestions, not commandments, to help you become a more informed, healthier consumer.

Natural does not equal safe

Choose products with less toxic effects. Do not be fooled by pretty logos or slogans. There are no legal definitions for words such as "natural," "fresh," "green" or "botanical" and often they are used with products no safer than others on the shelf. If you are looking for something organic, make sure the label says "organic." That is the only term that has any legal standing.

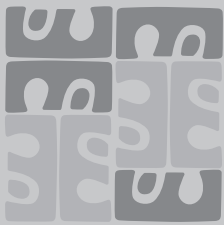
Also, some natural ingredients have proven harmful effects. Essential oils are extremely concentrated plant derivatives, and if used should be used with caution. If some is good, MORE IS NOT BETTER. Using too much may burn or irritate skin or mucus membranes.

Read Labels

If you know the hazards of some key ingredients, you can evaluate products yourself. The first ingredient in the list makes up the greatest amount of the product, the last ingredient is present in the least quantity. Unfortunately, on some products only the so-called "active" ingredients need be listed. Other components, which may have harmful health effects, may not be listed at all. Some of the toxics in personal care products, for instance, are



A Guide to Less Toxic Products



by-products of the manufacturing process and therefore not on the labels as ingredients.

You don't have to be a chemist to find and avoid parabens. This is a group of chemicals often used in personal care products that has been found to have endocrine disrupting properties. A chemical name in the paraben family is usually preceded by the prefixes methyl-, ethyl-, butyl- or propyl-, so you can look for these in the list of ingredients.

Many companies using less-toxic compounds are eager to make their ingredients known, so look for this information on labels or on information sheets or posters in stores. There are easy-to-find alternatives, but you need to read the labels and be careful and informed.

What is an endocrine disruptor?

It is known that increasing amounts of estrogen in the body may increase a woman's risk of breast cancer. The role of estrogen in some breast cancers (and other reproductive cancers) raises the possibility that environmental contaminants that act as estrogens or anti-estrogens might also be involved. Studies indicate a positive association between both dioxin and diethylstilbestrol (DES) and breast cancer. These chemicals and others, including PFOA and bisphenol A, are known as estrogen disruptors because they have been found to interact with animal and human cells' genetic material, disrupting normal cell function and reproduction.

How chemicals enter the body

Of growing concern are chemicals or chemical mixtures that, once absorbed and circulated, add to the total level of toxic chemicals in our bodies, otherwise known as "body burden." Emerging science is showing that the human body can eliminate some toxins and can handle some others,

but the body's ability to self-cleanse can be overwhelmed. There are three principal routes of exposure: the skin, the lungs, and the mouth.

- **Your skin** — Absorption through the skin, the largest organ of your body, is a significant source of exposure to chemicals in personal care and household cleaning products, especially since they may come into frequent and substantial contact with the skin. Some chemicals will cause skin irritation as a result of contact.
- **Your lungs** — When you breathe, you expose delicate lung tissue not only to oxygen, but also to other chemicals which then come into direct contact with your blood. Once in the blood, inhaled chemicals pass to the heart and are distributed to other organs without first passing through the detoxification process of the liver. Toxic chemicals can cause damage throughout your body and some chemicals and particles can injure the lung tissue itself. Aerosol sprays are of particular concern in home products, as the particles they produce are very small.
- **Your mouth** — Toxic chemicals that enter the body via the mouth are absorbed through the gastrointestinal tract. These include chemicals that are on or in products we eat or drink, those ingested from substances which are applied near the mouth such as lipstick, or they can be transferred to the mouth through hand to mouth activity. Children are particularly likely to ingest chemicals this way.

Web Resources:

www.dep.state.pa.us
www.ejnet.org/dioxin
www.ewg.org
www.foodsafety.gov
www.thegreenguide.com
www.lesstoxicguide.ca
www.nottoopretty.org
www.safecosmetics.org
www.swpahhw.org

Produced by

The Collaborative on Health and the Environment in Pennsylvania
www.che-penn.org

The Center for Healthy Environments and Communities at the University of Pittsburgh
www.chec.pitt.edu

Funded by The Heinz Endowments
2005

*Better
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