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Title: Greener Spring Cleaning – Good for Health and the Environment

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Knowledge about "green" cleaning practices can protect both children's health and the environment. Commercially available cleaning products often contain a mixture of chemicals and fragrances, and manufacturers may not be transparent in disclosing all ingredients. In addition to the risks associated with ingestion or eye splash, particular chemicals may cause dermatitis, asthma exacerbation, endocrine disruption, or heightened cancer risk. This quarter's Green Tip will discuss choosing safer cleaning products and trusted resources in preparation for spring cleaning.

Understanding the Health and Environmental Safety Profile of a Product:

The US Environmental Protection Agency (EPA) Safer Choice label indicates that the product meets strict health and environmental criteria. Each ingredient within the product is reviewed for reproductive and developmental toxicity, carcinogenicity, environmental persistence, and potential to harm aquatic life. The EPA maintains a database of more than 2,200 cleaning products which meet the Safer Choice standards; consumers can also search this database in Spanish. Products can be researched by category (example: all-purpose cleaners) or manufacturer. Additionally, the EPA maintains a repository of safer chemical ingredients.

The Environmental Working Group (EWG) is a non-profit organization which certifies cleaning products as EWG VERIFIED if they meet stringent health and environmental standards and fully disclose all ingredients. For each product, the EWG evaluates respiratory, dermatologic, neurologic, developmental/reproductive, gastrointestinal, and oncologic toxicity; acute and chronic aquatic environmental safety; and transparency of ingredient lists. For products which do not meet the strictest "VERIFIED" criteria across these domains, they are rated on an A to F scale. The EWG maintains a database of more than 2,500 products, a "label decoder" for understanding product claims, and a downloadable guide with tips for preparing homemade green cleaners.

The non-profit Green Seal certifies cleaning products as ecofriendly if they are non-toxic, non-carcinogenic, phthalate-free, and with low volatile organic compounds (VOC). The Green Seal label also considers the performance of the product and environmental aspects of the packaging. The Green Seal directory can be searched by product name or manufacturer.

Choosing Products that Minimize Health Risk

Quaternary ammonium compounds, also known as QACs or quats, are disinfectants that are commonly found in household cleaners advertising anti-microbial properties. QAC exposure is associated with asthma exacerbations and dermatitis. Routine home cleaning does not typically require the use of disinfectants, and cleaning with less hazardous products can minimize the health risk to children and caregivers.

When a disinfectant is required, bleach is a popular choice because it is readily accessible and inexpensive. However, the vapors can cause mucous membrane irritation and trigger asthma symptoms.

When bleach mixes with ammonia, commonly found in other household products, a chemical reaction produces toxic chloramine gas. Hydrogen peroxide is a safer household disinfectant than bleach and can also be readily obtained.

Fragranced air fresheners are ubiquitous and contribute to indoor air pollution through the emission of VOCs and phthalates. These chemicals can cause mucous membrane irritation and respiratory and neurologic symptoms. Phthalates are also associated with endocrine disruption. Instead of using air fresheners, try removing the odor source, improving ventilation in the area, and misting the air with water-diluted vinegar spray.

Do-It-Yourself Green Cleaning

Homemade household cleaners can be less expensive, protective of children's health, and better for the environment. Win-win-win! Recipes generally involve mixing water, unscented liquid dish soap, vinegar, and baking soda in different combinations. Easy recipes are available for all-purpose and bathroom cleaners. Microfiber cloths are "greener" than traditional dust cloths, disposable wipes, and paper towels and are highly efficient at removing household dirt and grime. The New Jersey Department of Health offers a guide for how to clean and maintain microfiber tools.

Labels to Search For When Choosing Green Cleaning Products