Environmental Toxicity Awareness

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Vibrant Health Services
EASE Cancer Foundation
H2O At Home
Discover Personal Environmentalism
Environmentalism

“Advocacy for or work toward protecting the natural environment from destruction or pollution.”

Let’s apply this to our Self for preventive health, detoxification, healing, and well-being
Synthetic Chemicals in the US

- 80,000+ registered for use
- 200 tested for safety
- Only 11 banned/regulated in US
- 1,300+ banned/restricted in EU
- Studies linking chemical exposures to breast cancer = Thousands!
The average American woman uses ~ 12 personal care products every day.

Toxic chemicals found in personal care products:

- **Foundation**: Heavy metals
- **Blush**: Ethanolamine compounds
- **Nail Polish**: Toluene
- **Sunscreen**: Octinoxate
- **Shampoo**: 1, 4 dioxane
- **Mascara**: Nitrosamines
- **Lipstick**: Lead
- **Fragrance**: Butylated hydroxyanisole
- **Body Lotion**: Parabens
- **Deodorant**: Triclosan

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“Taking joy in living is a woman’s best cosmetic.”

Rosalind Russell
Did you know?

- Average US woman uses 168 chemicals on their body every day
- We absorb up to 60% of what we put on our skin
- Children absorb 40-50% MORE than adults
- Children: higher risk for diseases later in life when exposed to toxins
Did you know?

- Size of US cosmetics industry: $71 billion+
- US federal law allows chemicals into personal care products linked to: cancer, infertility, birth defects, skin & respiratory allergies, learning disabilities, reproductive problems
- Untested chemicals steadily increase; while breast cancer incidence has risen dramatically
Personal care products can have almost any chemical as an ingredient

- Known carcinogens/substances that can harm fetal & infant development
- Misleading/incomplete ingredient labeling
- Unsubstantiated product benefit claims
- No required safety testing/review of products or ingredients before sold
REACH (Europe)

- Addresses the production/import + use of chemical substances and their potential impacts on both human health and the environment. 849 pages - 7 years to pass. The most complex legislation in the Union's history; the most important in 20 years. It is the strictest law to date regulating chemical substances. June 2007 with a decade deadline on imports; further update in 6/18
Begin each day with a grateful heart
Phthalates = toxin [EWG 4-10]  

- Used in manufacture of plastics  
- Well known endocrine disruptor  
- Plastic drinking bottles, styrofoam cups, microwaving plastics  
- Makeup, detergent, shampoo, hand soap; most nail polish  
- Time-released pharmaceutical drugs  
- Cause neurological & developmental disorders; Linked to male increased waist circumference, insulin resistance
Parabens = toxin [EWG 4-7]
Preservative; antimicrobial, antifungal

- Propyl, Isopropyl, Butyl, Isobutylparabens
- Estrogen-mimicking preservatives
- Beauty, personal care products; 90% of packaged grocery items
- Found in breast cancer tumors of 19 of 20 women studied
- May cause reproductive, developmental disorders
- European Union banned in 2012
Triclosan = toxin [EWG 7]

- Liquid hand/dish soap, face wash, toothpaste, deodorant, clothing, mattress, shoes, sponges
- Wastewater treatment does not remove all ⇒ bioaccumulates; very toxic to aquatic systems
- Linked to liver & inhalation toxicity
- Hormone disruptor; may disrupt thyroid
- Antibiotic resistance; Cross resistance
- Concentrated in dust; high ingestion for young
- Children with ↑ exposure: ↑ allergies, hayfever
- Found in breast milk; potential toxicity to fetal/childhood development
Triclosan = toxin

- **Triclocarbon** (chemical cousin)
- **12/17:** FDA finalized a rule that it first proposed in 2015; triclosan and 23 other active ingredients aren't generally recognized as safe and effective (GRASE) for use in OTC health care antiseptic products. These include health care personnel hand washes and rubs, surgical hand scrubs and rubs, and patient antiseptic skin preparations.
- May no longer be marketed without undergoing premarket review
We need to start worrying about what kind of world we are going to leave for Keith Richards.
Household cleaners have impact on our health and the environment!

Volatile fumes released during ordinary cleaning can contaminate air for up to 20 minutes after use.
Cleaners = toxins

- Asthma
- Cancer
- Reproductive & Developmental Problems
- Allergens, Irritants
- Chemical burns, Poisonings
No federal regulations require cleaning supplies advertised as “natural”, “organic”, “non-toxic”, “biodegradable”, or “earth friendly” to live up to these claims.

Products with the U.S. Dept of Agriculture’s “organic” seal contain ingredients from plants grown without artificial pesticides and fertilizers – BUT they are NOT automatically safer for you/environment.

Some private certification programs are lax, misleading
Cleaners & Health: Cancer

- **Formaldehyde/formalin [EWG 10]**
  - Known human carcinogen
  - Generated in cleaning products by formaldehyde-releasing *preservatives*, bronopol (2-bromo-2-nitropropane-1,3-diol)
  - Detected in: Comet, Pine-Sol, Simple Green
  - Citrus- and pine oil-based cleaners emit chemicals (terpenes) that react with ozone in home air to form formaldehyde
  - Formaldehyde formation is worst on smoggy days, when ozone levels are high
Formaldehyde listed on available safety data sheets:

- Ajax Dish Liquid, Lemon
- Ajax Triple Action Dish Liquid Hand Soap, Orange
- Fab Ultra Liquid Laundry Detergent, Spring Magic
- Finish All in 1 3X Concentrated Gelpacs, Orange Grease Cutting
- Finish All in 1 8X Power Gelpacs, Orange Grease Cutting
- Palmolive Ultra Dish Liquid, Original
- Palmolive Ultra Concentrated Dish Liquid, Lotus Blossom & Lavender
- Woolite Everyday Laundry Detergent, Sparkling Falls.
ELIMINATE:

♦ Antibacterial products
  ♦ Develop drug resistant super-bugs
  ♦ Warm soap/water, essential oils, chiffonnettes
ELIMINATE:

❖ Air fresheners
  ❖ Allergies, asthma, irritants, persistent chemicals
  ❖ 😊 Open windows; use fans; essential oils

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ELIMINATE:

- Fabric softener & dryer sheets
  - Allergies, asthma, lung irritant
  - 😊 White vinegar in rinse cycle
  - Nylon stocking with 10 safety pins or smooth ball made of aluminum foil
- Dryer balls: Woolzies or others

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ELIMINATE:

- Drain cleaners & oven cleaners
  - Burn eyes, skin, lung irritant
  - 😊 Scouring Clay, Scouring Sponge, chiffonnette
Foaming Soap Dispenser
MAKE HAPPINESS A HABIT.
There are too many people counting calories and not enough people counting chemicals.
EWGs Skin Deep Cosmetics Database

- www.ewg.org/skindeep/, phone app!
- Sun, Make Up, Skin Care, Hair, Nails, Fragrance, Babies & Moms, Oral Care, Men

- Look up a product, an ingredient, search by company, find safe alternatives

Two-part score:

- Ingredient Hazard Score: 0-2 Low, 3-6 Moderate, 7-10 High
- Data Availability Rating: None, Limited, Fair, Good, Robust
Toxicity Datasets, Ingredient GRADES: A-F
- Ingredient safety + content disclosure
- Environmentally friendly certifications
- pH, VOC/volatile organic compounds
- Regulatory violations (only 7% adequately disclosed contents!)

Air fresheners, bathroom, all purpose, dishwashing, floor care, furniture, kitchen, laundry, other (> 2,500 products)

Top Products; Label Decoder, Report
Grade A: Lowest Concern
Few/no known or suspected hazards to health or environment.
Good ingredient disclosure.

Grade B: Low Concern
Limited potential for hazards to health or the environment.
At least some ingredient disclosure.

Grade C: Moderate Concern
Some potential for hazards to health or the environment.
At least some ingredient disclosure.

Grade D: High Concern
Likely hazards to health or the environment.
May have poor ingredient disclosure.

Grade F: Highest Concern
Potentially significant hazards to health or the environment or poor ingredient disclosure.
Best Disposal

♦ Do NOT dump products down drain
♦ Chemicals in water ⇒ Very toxic to aquatic ecosystems; can form toxic byproducts (chloroform, dixoin); bioaccumulates in living organisms
♦ Trash ends in a landfill or incinerator
♦ Yet... Trash disposal is *generally better* than pouring down the drain
CLEAN WATER

Water Filter Buying Guide

www.ewg.org/research/ewgs-water-filter-buying-guide

Big Berkey

Aquasana
CLEAN AIR

- 2016 Consumer Reports Air Purifier Buying Guide
  www.consumerreports.org/cro/air-purifiers/buying-guide.htm

- Types: portable room purifiers or whole-house air filters

- Considerations, features, pros/cons, what they do well, what’s not so great, terms, brands
CLEAN FOOD

- Local, Fresh
- **Organic** and non-GMO verified
- Eliminate: processed “food” (toxic packaging), colors, flavors, additives, preservatives, sweeteners; plastics
- Recycle: helps Us and the Earth

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RESOURCES

www.ewg.org

www.safecosmetics.org

www.bcpp.org

www.cleanwaterfund.org/
H2O At Home

- European eco-certified products
- Full ingredient disclosure
- Couer de Foret Program: biodiversity, reforestation, sustainable organic farming
- Coral Guardians: ocean protection
- Carbon neutral company! Eco packing/shipping
- Microfibers and French hard pack clay

www.myh2oatthome.com/chandravadillano

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To Your Health!

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