

The following information was part of a seminar on Household Toxins, presented by Henri Roca, MD, Medical Director at Greenwich Hospital's Center for Integrative Medicine, and Clinical Integrative Pharmacist Scott Berliner, RPh, with the Radiant Health Apothecary at Greenwich Hospital's Center for Integrative Medicine.

Detox Your Home

1. Filter your water. A simple water filter can capture a lot of pollutants. To find out how safe your city's water is, get a copy of your local water-utility report at www.epa.gov/safewater/dwinfo/index.html.
2. Know what's in your grooming products. Shampoos, lotions and makeup may contain a number of toxins like parabens and phthalates, which have been identified as hormone disruptors and may be linked to certain cancers. Avoid anything that includes the words "paraben" (often used as a suffix, as in methylparaben) or "phthalate" (listed as dibutyl and diethylhexyl or just "fragrance".)
3. Don't eat microwave popcorn. The inside of a microwave popcorn bag is usually coated with a perfluorinated chemical (PFC) called a fluorotelomer that can break down to form perfluorooctanoic acid (PFOA). A pregnant woman's exposure to PFOA may reduce her baby's birth weight. Moreover, the EPA's scientific advisory board has recommended that the chemical be listed as a likely human carcinogen. Some perfluorinated compounds are extremely persistent and never break down in the environment.
4. Don't get stain-protection treatment. Also avoid pots and pans that have a nonstick coating. While nonstick materials are not made of perfluorinated chemicals, the substance is often used in their production. If the pan gets scratched or worn, the chemicals can be released into the air.
5. Limit use of canned food and plastic containers. Most canned goods are coated with a resin lining derived from Bisphenol-A (BPA), which recently made headlines because of its presence in the plastic used in some baby bottles. A component of polycarbonate plastic, BPA may be linked to certain cancers, fertility and behavioral problems in children. The risk is especially great when exposed in the womb.
6. Avoid heating foods in plastic containers. BPA can also leach into food when it is scratched or worn so, to be safe, if you have a water bottle or other plastic container, discard it if it becomes scratched or clouded.
7. Use PBDE-free electronics. Polybrominated Diphenyl Ethers (PBDE) are a family of flame retardants. The chemical, most commonly found in TVs and computer monitors, is stirred into the equipment's plastic and can heat up over time, causing the material to break away and settle into the dust.
8. Don't use paint made with volatile organic compounds (VOC). VOCs include a variety of chemicals and are found in some household products like paint and paint strippers. They are emitted as gases and have been associated with allergies, breathing problems and asthma, and are suspected of causing cancer in some cases.
9. Patronize a perc-free dry cleaner. Perchloroethylene (perc) is also a VOC and is most commonly used in dry cleaning. The EPA identifies perc as a known human toxin and "a precursor to ground-level ozone (smog)."
10. Dust and vacuum weekly. Toxins like PBDE can settle into the dust in your house, so to be extra safe, it's best to keep your house clean through regular dusting and vacuuming. This is especially important if you are pregnant, have a young child or pet, which can transfer the dust through its movements.

Possible Substitutions for Household Toxins

(Source: *A Guide to the Safe Use and Disposal of Hazardous Household Products*, Metropolitan Area Planning Council, Massachusetts.)

INSTEAD OF THIS	TRY THIS
Air Freshener	Set vinegar out in an open dish.
Drain Cleaner	Pour boiling water down the drain, or use a plunger or a metal snake.
Furniture Polish	1 tsp. lemon oil in 1 pint mineral oil, or rub crushed raw nuts on the wood for an oily polish.
Houseplant Insecticides	Wash leaves with soapy water, then rinse.
Mothballs	Put clothes in cedar chests, or place cedar chips around clothes.
Oven Cleaner	Salt, baking soda, water (and elbow grease!)
Roach Spray	Chopped bay leaves & cucumber skins, or boric acid (sold in powdered form), or 1 part borax and 1 part brown sugar set out in dishes (these are not as effective, and the latter two may be hazardous to animals and children).
Silver Cleaner	Soak silver in 1 qt. warm water containing 1 tsp. baking soda, 1 tsp. salt and a piece of aluminum foil.
Toilet-Bowl Cleaner	1/2 cup bleach
Window Cleaner	2 tbsp. vinegar in 1 qt. water

Chemical	Potential Health Effects	Common Exposure Sources
Bisphenol A (BPA)	Birth defects, hormone disruptor	Polycarbonate plastic, canned foods and beverages
Lead	Toxic to brain and nervous system, decreased IQ, aggression and hyperactivity disorders	Lead based paint, household dust, outdoor soils, consumer products
Mercury	Toxic to brain and nervous system	Consumption of contaminated fish and shellfish

Perchlorate	Interferes with iodine uptake of thyroid gland, which regulates hormones necessary for proper development	Drinking water, consumption of irrigated crops, milk
Phthalates	Hormone disruptor, birth defects, reproductive disease, reduced sperm counts, heart disease, diabetes	Polyvinyl chloride plastic, household cleaners and other products with synthetic fragrance, cosmetics, food packaging
Polybrominated diphenyl ethers (PBDEs)	Interfere with brain development and may be linked to hyperactivity, toxic to reproductive system	Flame retardants used in electronics, polyurethane foam in upholstered furniture and mattresses, black out drapes and textiles that off-gas and can be found in household dust and food
Triclosan	Toxic to liver, disrupts thyroid hormone system (necessary for development), may cause cancer	Antibacterial agent used in liquid soap, beauty products and cleaning products

Substance and Potential Health Effect

- 1. Alcohols - Acid & Alkali:** rashes, muscle weakness, headaches, dizziness, nerve damage, vision problems, sleeping problems, stomach cramps, disorientation, depression, coughing, respiratory problems, anemia, organ damage, fatigue, heart damage, cancer, death
- 2. Chlorines:** headaches, mental function difficulties, pulmonary edemas and heart disease, anemia, diabetes, gastrointestinal and urinary tract cancer, organ and gland cancer, severe eye problems, immune system breakdown, child development problems
- 3. Detergents/Emulsifiers:** strip skin of protective oils, skin irritation, scalp eruptions, interference with nutrient absorption, hair loss, allergic reaction, cataract formation, organ damage, reproductive damage, blindness, cancer
- 4. Synthetic Fragrance & Dyes:** allergic reactions, skin rashes, stomach upsets, muscular aches and pains, violent coughing and sneezing, irritability, vertigo, hyperactivity, convulsions, emotional and behavioral problems, Leukemia, Hodgkin's, emotional problems, ADD, multiple tumors, reproductive damage, headaches, dizziness, organ damage, depression, cancer
- 5. Heavy Metals:** Abdominal cramps, nausea, joint and bone pain, muscle weakness, mouth sores, muscle, joint, and bone pain; cancer, motor difficulties, reduced intelligence, brain disorders, short attention span, hyperactivity, short attention span, emotional disorders, immune disorders, genetic damage

6. Pesticides & Fungicides: Flu-like symptoms (fatigue, muscle and joint pain), stomach cramps, nervous system disorders, insomnia, memory loss, swelling of body parts, dizziness, genetic mutations, birth defects, gland tumors, organ damage, cancers, death

7. Petrochemicals: inhibit skin functions, pimples, rashes, splitting nails, sensitivity to sun, headaches, premature aging, allergic reactions, depression, fatigue, intestinal gas, asthma, respiratory failure, immune system disorders

8. Preservatives (synthetic): headaches, shin rashes, eye damage, asthma, respiratory problems, tumors, cancer, digestive problems, mental confusion, organ damage, muscle weakness & cramps, loss of motor control, joint pain, reproductive damage

Natural Toothpastes

- Cleaning the teeth is a mechanical process. Brushing for long enough and thoroughly enough is best.
- Silica compounds derived from sand are excellent whiteners.
- Xylitol is an excellent natural antibacterial agent used in mouthwashes and toothpastes. **Spry** is the brand we recommend.
- Mint, chamomile, and aloe are natural alternatives to chemical based mouthwashes.

How To Make Popcorn the Old Fashioned Way

Ingredients:

1 cup popcorn kernels

¼ cup vegetable oil

Heavy duty skillet or pan with a lid or an old-fashioned popcorn popper with stirring mechanisms

Heat oil in the pan, skillet, or popcorn popper.

Add the cup of popcorn and place the lid on top.

Continually shake or stir the popcorn during the popping process. You will notice the popping corn will ping the lid during the process. Don't let this scare you. It's a normal process in popping corn in this manner.

The popcorn will take approximately 2 to 4 minutes to pop.

Once the popping has slowed down, remove from the heat so it doesn't burn.

Empty the popcorn into a paper bag.

Add the butter and salt. Shake for 30 seconds so the salt and butter are thoroughly mixed. Transfer to a bowl.

Natural Products from the Radiant Health Apothecary

Call Greenwich Hospital's Center for Integrative Medicine at 203-863-3615 to learn more or to purchase any of the following products:

Insect repellent:

Bug-band – a natural spray lotion that repels mosquitoes, ticks, flies, gnats and Fleas; contains geraniol, rosemary, geranium oil, and mint.

Toothpaste:

Spry is the brand we recommend.

Homeodent is a toothpaste that can be used with homeopathic remedies that are neutralized by chamomile and all kinds of mint.

Additional web resources:

- Drmarchese.com
- Safecosmetics.org
- Organicconsumers.org/bodycare
- Envirocancer.cornell.edu
- Environmentalhealthnews.org
- Nottoopretty.org
- Thegreenguide.com
- Noharm.org
- Healthytomorrow.org
- Pesticide.org
- ewg.org