

Sources of the Most Common Toxins that Disrupt Hormones

Chemical	Where It's Found	Possible Effects	How to Avoid It
<p>BPA: Bisphenol A (endocrine disruptor that acts like estrogen in the body) Used in epoxy resins and to harden polycarbonate plastics.</p>	<p>Found in #3 & #7 plastic, lining of canned food and beverages, food containers, safety and sports equipment, computer and cell phone casings, receipt paper.</p>	<p>Linked to a wide variety of ills including infertility, breast and reproductive system cancer, endometriosis, obesity, diabetes, early puberty, behavioral changes in children and resistance to chemotherapy treatments.</p>	<p>Avoid canned food (unless specifically marked "BPA Free"). Limit contact with paper receipts and wash hands after touching them. Avoid plastics marked with "PC," for polycarbonate, or recycling label #3 or #7.</p>
<p>Dioxins (family of toxic chemicals that do not break-down easily) Formed as a by-product of many industrial processes.</p>	<p>Dioxins are found throughout the world in the environment and accumulate in the food chain, mainly in the fatty tissue of animals.</p>	<p>Dioxins are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones and cause cancer.</p>	<p>Do your best to buy organic and pastured or grass-fed animal products. Buy wild-caught seafood or smaller fish such as sardines, herring, mackerel and anchovies.</p>
<p>Atrazine Common herbicide that is used on most corn crops in the United States.</p>	<p>Found in drinking water and contaminated crops.</p>	<p>Linked to breast tumors, delayed puberty and prostate inflammation in animals. Some research has linked it to prostate cancer in humans.</p>	<p>Buy organic produce and get a drinking water filter certified to remove atrazine. For help finding a filter, check out EWG's buying guide: ewg.org/report/ewgs-water-filter-buying-guide</p>
<p>Phthalates Plasticizers used to make plastic soft & pliable.</p>	<p>Found in #3 plastic, vinyl floors, raincoats, medical tubing, cosmetics, air fresheners, paints, personal care products, nail polish, "fragrance", shower curtains and some plastic toys.</p>	<p>Studies have linked phthalates to hormone changes, lower sperm count, less mobile sperm, birth defects in the male reproductive system, impaired neurodevelopment in girls, preterm birth, obesity, diabetes and thyroid irregularities.</p>	<p>Avoid #3 plastic. Check children's toys (some phthalates are already banned in kid's products). Avoid products that list added "fragrance," since this catch-all term can mean hidden phthalates. Find phthalate-free personal care products with EWG's Skin Deep Database: ewg.org/skindeep</p>
<p>Perchlorate Works as an oxidizer and propellant. Found in fireworks, rocket fuel and explosives, bleach and some fertilizers.</p>	<p>Consuming contaminated water and food, living near waste sites.</p>	<p>Alters function of many organs, most commonly the thyroid gland by competing with iodine.</p>	<p>You can reduce perchlorate in your drinking water by using a reverse osmosis filter. You can also reduce its potential effects by getting enough iodine in your diet through food sources such as seaweed, kelp, dulse and seafood.</p>
<p>PDBE's (Polybrominated Diphenyl Ethers) Used as flame retardants, structurally similar to PCBs, PBDEs bioaccumulate.</p>	<p>Found in furniture foam, padding, rugs, drapes, baby clothes, pajamas, upholstery, textiles, electronics.</p>	<p>Linked with decreased immune system activity, thyroid problems and increase in cognitive defects. Prenatal exposure has an association with lower I.Q., higher hyperactivity scores and attention problems in childhood.</p>	<p>Use a vacuum with a HEPA filter, which can cut down on toxic-laden house dust. Avoid reupholstering foam furniture and take care when replacing old carpet (the padding underneath may contain PBDEs). Find more tips: ewg.org/pbdefree</p>
<p>Lead A pigment or coloring agent, and combined with other metals for form alloys</p>	<p>Found in pigments, dyes and ceramic glazes, pipes, PVC, storage batteries and ammunition. May be found in cosmetics, especially lipstick.</p>	<p>Linked with permanent brain damage, lowered IQ, hearing loss, miscarriage, premature birth, increased blood pressure, kidney damage and nervous system problems. Research has also shown that lead can disrupt the hormone signaling that regulates the body's major stress system (called the HPA axis).</p>	<p>Homes built prior to 1978 could potentially have lead paint. Crumbling old paint is a major source of lead exposure, so get rid of it carefully. A good water filter can also reduce your exposure to lead in drinking water. Use the EWG Skin Deep Database to check cosmetics, especially lipstick.</p>

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<p><u>Arsenic</u> Naturally occurs in groundwater. Used in herbicides, pesticides and fungicides, also used to treat wood prior to 2004.</p>	<p>May be found in decks, playground equipment, picnic tables, contaminated crops and water.</p>	<p>Arsenic can cause skin, bladder and lung cancer. It can interfere with hormone function and lead to weight gain/loss, immunosuppression, insulin resistance (which can lead to diabetes), osteoporosis, growth retardation and high blood pressure.</p>	<p>Reduce your exposure by using a water filter that lowers arsenic levels. For help finding a good water filter, check out EWG's buying guide: ewg.org/report/ewgs-water-filter-buying-guide</p>
<p><u>Mercury</u> A naturally occurring metal that gets into the air and oceans primarily through the burning of coal. Used to produce chlorine gas and caustic soda.</p>	<p>Found in fish, thermometers, fluorescent light bulbs, dental fillings, batteries, thimerosal, certain skin lightening creams and antiseptic ointments.</p>	<p>Exposure is linked with neurotoxicity, autoimmune disorders, weakened immune system and altered hormone signaling. Prenatal exposure is associated with brain damage, blindness, seizures and inability to speak.</p>	<p>Choose low-mercury fish such as wild salmon and smaller species such as sardines, herring, mackerel and anchovies. The Natural Resources Defense Council has a "Smart Seafood Buying Guide" found at www.nrdc.org Having adequate selenium in the diet is also protective. Taking a chlorella supplement with your seafood can also help reduce exposure by binding to mercury and other toxins.</p>
<p><u>PFC's (Perfluorinated Chemicals)</u> Used to make products resistant to grease, stains and water.</p>	<p>Used in paper food containers (microwave popcorn, fast food wrappers), Scotchguard (carpet, clothing, car interiors, furniture) Teflon (cookware, water resistant clothing, fire protection)</p>	<p>Linked to decreased sperm quality, low birth weight, kidney disease, thyroid disease, high cholesterol and increased risk of cancer.</p>	<p>Skip non-stick pans as well as stain and water-resistant coatings on clothing, furniture and carpets. Avoid microwave popcorn and fast food when possible.</p>
<p><u>Organophosphate pesticides</u> Neurotoxic pesticides that target the nervous systems of insects.</p>	<p>One of the most common pesticides in use today.</p>	<p>Many studies link exposure to effects on brain development, thyroid, behavior and fertility.</p>	<p>Buy organic produce when possible. Check out EWG's Shopper's Guide to find the fruits and vegetables lowest in pesticide residues: www.ewg.org/foodnews</p>
<p><u>Glycol ethers</u> A group of chemical solvents commonly used in paints and cleaners.</p>	<p>Often found in paints, cleaning products, brake fluid and cosmetics.</p>	<p>May damage fertility or the unborn child. Children who are exposed to glycol ethers from paint in their bedrooms have substantially more asthma and allergies.</p>	<p>Check out EWG's Guide to Healthy Cleaning (ewg.org/guides/cleaners) and avoid products with ingredients such as 2-butoxyethanol (EGBE) and methoxydiglycol (DEGME).</p>
<p><u>Parabens</u> Chemical additives used to extend shelf life.</p>	<p>Used in cosmetics and personal care products such as shampoos, lotions, shaving gels, lubricants, toothpaste and pharmaceuticals. Also, found in some food products.</p>	<p>Acts as a weak estrogen once absorbed in the body. Linked with infertility, low sperm count, breast cancer, endometriosis, prostate cancer, ovarian cancer, asthma, allergies, obesity, skin cancer and contact dermatitis.</p>	<p>Check labels for anything containing "paraben" (Ex: methylparaben, propylparaben etc.) You can also find safe products using EWG's Skin Deep Database: ewg.org/skindeep</p>

References: Centers for Disease Control and Prevention (CDC) and Project TENDR
Environmental Working Group (EWG)
World Health Organization (WHO)
Genova Diagnostics Laboratory



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