

Detoxify your life

You don't have to grow your own food, wear hemp pajamas or brush your teeth with a stick. Our uncrunchy, hassle-free guide will help you clean out unhealthy chemicals, without giving up modern conveniences. Go *nature!*

By Judi Ketteler Photographs by Jamie Chung

I used to get a strange rash on my arm every fall, and the only thing that soothed it was hydrocortisone. Being able to treat the bumps seemed like a good thing. But a few years ago, the guy I was dating saw me dabbing on the cream. Horrified, he asked, “*Why are you putting poison on your body?*” As he argued his point, sounding more and more irrational, I realized I was dealing with a chemical-phobe.

The guy, Allen, became my husband. And the cortisone controversy turned out to be the first of many exchanges we would have about deodorant, tile grout, hand lotion, dryer sheets, paint, window cleaner, pipe sealer (don't ask), shampoo and many, *many* other products. “If you can smell it, you're eating it,” Allen likes to say. And in his brain, if you're eating chemicals, you are going to get cancer and die. Period.

I used to brush it off. “Allen,” I would begin, “do you know that heart disease is the biggest killer of Americans? If you were really worried about your health, you would exercise, monitor your cholesterol and eat less ice cream.” I was rational; he was crazy.

Then we had a child. I read about the dangers of bisphenol A (BPA) in baby bottles and formula cans, and the news put my rational brain on notice: What if Allen had been right all along? After all, we now have warnings not only about BPA but also endocrine-disrupting phthalates in beauty products, carcinogenic pesticides in produce, and the list goes on.

I had always figured that groups like the FDA and the EPA were looking out for me and my family. (My chemical-phobe husband never thought any such thing.) But as I dug into this issue, I learned that the United States puts very few regulations on chemicals. You probably have to jump through more government hoops to apply for a student loan than manufacturers do to produce the millions of chemical-infused products out there. This is so despite studies linking some chemicals to asthma, allergies, cancer, infertility, Parkinson's disease and other hard-to-cure conditions.

People tend to deal with this information in two ways, phobia or denial, says Philip Landrigan, M.D., director of the Children's Environmental Health Center at Mount Sinai School of Medicine in New York City. “But there is a middle path,” he says, “and scientific knowledge about the toxicity of widely used chemicals provides the map.” I no longer discount Allen's fears, but I know I can't eliminate plastic from my life. Besides, stressing about it is harmful, too. Still, we can all do things a bit smarter. Consider these pages a guide to lightening your chemical load—without losing your grip.

99%

of the 80,000 chemicals in circulation did not exist before 1950. We can't look to prior generations to see health effects.

93%

of Americans show traces of bisphenol A, a 2004 study finds. Women's BPA levels are higher on average than men's are.

57%

of foods, including grains, meat, produce and water, analyzed by the USDA Pesticide Data Program in 2009 contained residues of one or more pesticides.

Should you choose it or lose it?

Going 100 percent free of chemicals isn't practical—or necessary. So save your freak-outs for the ingredients that are truly harmful. Our cheat sheet reveals which products you should cut out, which you should cut back on and which you can stop worrying about.

Eliminate it

Antimicrobial chemicals Triclosan, the chemical used in hundreds of germ-fighting products, may damage the liver and disrupt thyroid hormones. These products contribute to drug resistance, and people using antimicrobial soap get sick as often as regular suds users, a review in the *American Journal of Public Health* finds. Toss triclosan. Gotta sanitize? Opt for alcohol-based gels.

Cigarettes Tobacco smoke contains ammonia, benzene, formaldehyde and 50 chemicals *known* to cause cancer. "Plus, smoking damages your lungs, kidneys and liver, the body's detoxifiers, which protect you from other chemical exposures," notes consumer advocate Debra Lynn Dadd, author of *Toxic Free*. For quit tips, turn to page 99.

Oil-based paints "Fresh" paint smell signals volatile organic compounds, solvents that can trigger breathing issues, headaches and dizziness, and that research links to reproductive problems and birth defects, says Gina Solomon, M.D., senior scientist at the Natural Resources Defense Council (NRDC) in San Francisco. Low- or no-VOC paints from brands such as Benjamin Moore have a similar texture but less toxicity.

Room fresheners "Essentially, they're air pollution," Dadd argues. Up to 20 percent of all people (and 34 percent of asthmatics) say they've had headaches, trouble breathing or other problems after inhaling room sprays, says researcher Anne Steinemann, Ph.D., professor of civil and environmental engineering at the University of Washington in Seattle. To get smells out of soft materials like sofas, Dadd advises, spritz on straight vodka from an atomizer.

Regulate it

Canned food BPA, the synthetic estrogen linked to cancer and abnormal brain development, is in the lining of most food and beverage cans, and it can leach out. Whether the food is organic doesn't matter, USDA tests show. When possible, buy fresh or frozen items; there's no BPA in plastic freezer bags, says Sarah Janssen, M.D., senior scientist at the NRDC.

Household cleaners Using chlorine bleach, cleaning sprays and disinfectants more than once a week is linked to asthma, says the author of a 2010 Spanish review of studies. Dr. Solomon adds, "There is a role for strong cleaning agents if used with care." Save them for serious mold and mildew, and never mix chlorine bleach with ammonia, because the combo produces toxic fumes. Wear gloves, open the windows, and dilute every cup of bleach you use in 10 cups of water.

Plasticware Memorize the numbers 3, 6 and 7. These recycling codes mean plastic may have BPA, Dr. Landrigan says. Instead, store food in glass or plastic with codes 4, 5 and 12. But no plastic is "microwave safe." The claim means a container won't melt, not that chemicals won't seep into your dinner.

Scented stuff "The word *fragrance* on a label may stand in for hundreds of chemicals," Dr. Solomon says, including phthalates and musks, endocrine disruptors that have been linked to reproductive dysfunction. The laundry room is a good place to cut back. Seek out unscented detergents and dryer sheets, as coating clothes with chemicals means you're exposed all day, all over your skin.

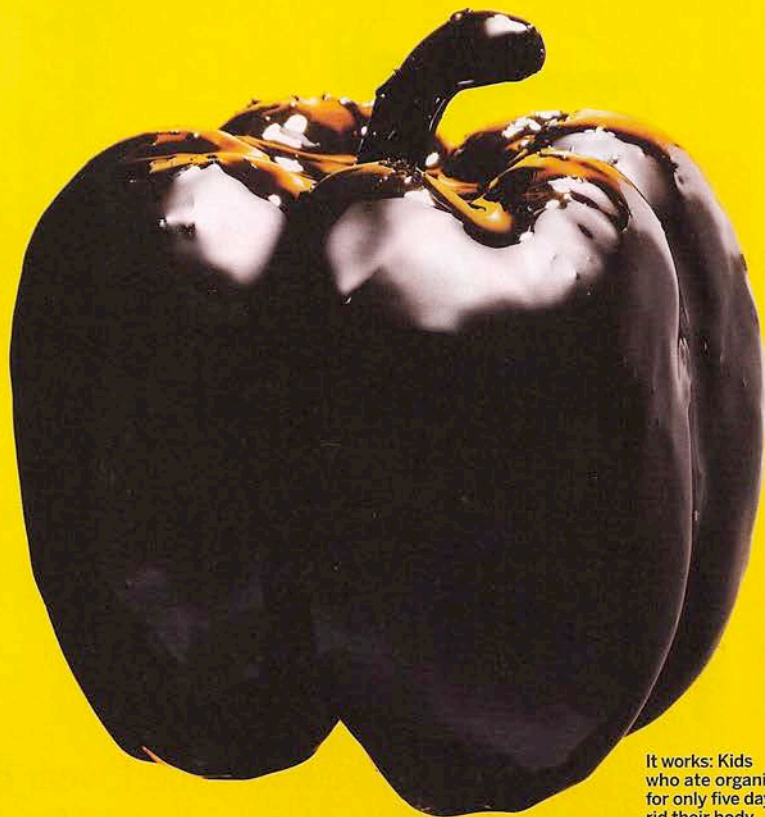
Tolerate it

Aspartame Despite Internet rumors, a National Cancer Institute study of nearly 500,000 people discerned no link between consuming this sweetener and developing leukemia, lymphoma or brain cancers. Nor is it tied to multiple sclerosis or lupus. (But remember, most soda cans do contain BPA.)

Cotton Even though conventional cotton farmers use high levels of potentially planet-harming pesticides, there's no evidence that simply wearing the fabric harms consumers, testing by the Bremen Cotton Exchange in Germany reveals. As for tampons, they expose us to 13,000 to 240,000 times fewer dioxins than our everyday diet does, according to a report in *Environmental Health Perspectives*. Be confident choosing any brand that works for you, organic or not.

Fluoride toothpaste The debate over water fluoridation shouldn't have you questioning your Crest. The feds have advised utilities to lower the amount of fluoride allowed in tap water, due to studies linking fluoridation with bone fractures and stiffness; however, both environmentalists and dentists agree that fluoride toothpaste is safe and necessary for everyone older than 2. Check the label for a paste without triclosan—some brands add it, supposedly to prevent germs, plaque or gingivitis.

Nonstick pans The EPA is working to phase out perfluorooctanoic acid (PFOA), used in making Teflon coating. Nonstick cookware, however, doesn't expose you to PFOA, even when you subject it to extreme heat, confirms a study in *Food Additives & Contaminants*. Scratched parts are fine, too, so flip your flapjacks fearlessly.



It works: Kids who ate organic for only five days rid their body of pesticides.

Change your sheets! And other easy fixes

1 IN YOUR BEDROOM "If people would buy different sheets, they might not need sleeping pills," Dadd says. Polyester-cotton blends and permanent press linens have a finish that releases formaldehyde, which can irritate the throat and eyes—not helpful for peaceful sleep. Use untreated cotton sheets; avoid wrinkles by taking them out of the dryer right away.

2 IN YOUR LIVING ROOM Pressed-wood products are another source of formaldehyde, which Laura Beane Freeman, Ph.D., investigator with the National Cancer Institute, has linked to myeloid leukemia in factory workers. Let pieces air out in a room with doors shut and windows open, suggests Tom Lent, policy director at the Healthy Building Network in Washington, D.C. Or shop for used pieces—they've already aired out.

3 IN YOUR GARDEN Before dousing your lawn with chemicals, try TLC: Water with a soaking hose, add weed-inhibiting mulch to garden beds, and set the mower for 3 inches (as longer grass shades and stifles weeds). Got a weed you can't stand? Try herbicides made with corn gluten meal or vinegar.

4 AT THE MARKET You can consume nearly 80 percent fewer pesticides by eating organic versions of the 12 most contaminated items, the Environmental Working Group (EWG) concludes. The worst produce is apples, followed by celery, strawberries, peaches, spinach, imported nectarines, imported grapes, bell peppers, potatoes, domestic blueberries, lettuce and kale.

5 ON YOUR TABLE Some fast food wrappers and bags, pizza boxes and microwave popcorn bags contain oil- and water-repelling chemicals that transfer to and metabolize in the body, forming likely carcinogens, says Jessica D'eon, Ph.D., a researcher in the department of chemistry at the University of Toronto. The EPA is working to eliminate the chemicals by 2015; until then, they're yet another reason to cut back on grease bombs.

6 IN YOUR CLOSET The dry-cleaning fluid perchloroethylene (PERC) can cause headaches and liver and kidney damage. "And a newer method swaps out PERC for D-5, which caused uterine cancer in lab animals," Dr. Solomon says. "Wet cleaning" or carbon dioxide methods are ideal. If you dry-clean, keep clothes bagged while driving home so you don't pollute your car, then toss bags and air clothes outside or in an apartment stairwell for an hour.

7 IN YOUR JEWELRY BOX In tests of costume jewelry with metal, most from China, 19 percent contained the carcinogen cadmium, reports Jeff Weidenhamer, Ph.D., professor of chemistry at Ashland University. "Small exposures to cadmium can add up and cause kidney and bone damage," he says. Buy locally made bling, and ask artisans where they get materials.

8 AROUND YOUR HOME Your Swiffer isn't organic, but it can reduce toxins. "Chemicals can piggyback on dust," Dadd explains. Women whose breast milk contained the fire retardant Deca, which animal studies link to problems with memory and attention, also had Deca in their vacuum-bag dust, EWG found. Dust surfaces and floors weekly, take off your shoes and wipe pets' paws at the door (so no one tracks in chemicals), and change filters in your central-air system at least once a year. Then breathe easy.

Clean 'n' pretty Glam green products for on (and under) your sink

A better berry

Raspberry extract provides a fresh, not fake, scent, and Burt's Bees discloses every ingredient, so you know there are no hidden phthalates or petrochemicals lurking. Burt's Bees Raspberry & Brazil Nut Shampoo and Conditioner, \$8 each; BurtsBees.com



Garden fresh

This gentle moisturizer with sunblock derives its super cooling powers (and a light scent our tester dug) from organic cukes, aloe vera and sweet almond oil—not phthalates. Yes to Cucumbers Daily Calming Moisturizer with SPF 30, \$15; Drugstore.com



Nontoxic nails

No kidding! Created by podiatrists, this polish omits formaldehyde and phthalates used in most other formulas. Testers said it "went on nicely—no streaks" and "dried much more quickly than salon polishes." Dr.'s Remedy Positive Pastel Pink Enriched Nail Polish, \$17; RemedyNails.com



Smart spray

The hypoallergenic classic now comes in a subtle tangerine-thyme scent derived from essential oils. "This stuff cut through grody old stains on my desktop—without smelling like scary ammonia," our tester reported. Bon Ami All-Purpose Cleaner, \$3; BonAmi.com



Safer suds

This powder contains zero dye or fragrance but loads (up to 80 of them per box) of cleaning power. "It took out the mildew stink from some towels that I was on the verge of tossing," said one grateful tester. J.R. Watkins Laundry Detergent, \$13; JRWatkins.com



Bug zapper

Give viruses and bacteria the blues by keeping this pretty sanitizer at hand. It doesn't contain the controversial chemical triclosan. No sticky fingers, either: Our tester liked the crystal consistency and quick drying. Method Hand Sanitizer, \$4; MethodHome.com



Sign on for safety! The Safe Chemicals Act would set safety standards, clarify labels and recall the worst stuff. Sounds good, no? Visit SaferChemicals.org to show your support.