

Soft Plastics

In our last video, we covered ways to reduce our exposure to BPA and hard plastics. Now we are going to focus on tossing phthalates and soft plastics.

Why toss phthalates?

In addition to health conditions mentioned in the plastics overview video, phthalates have estrogenic and antiandrogenic activity. So while BPA mimics estrogen, phthalates block testosterone action in men and women.

And remember, they are also considered asthmagens (which cause asthma), carcinogens (which cause cancer), neurotoxins (which impact the nervous system, mood, and behavior), obesogens (which make us gain and hold on to weight no matter how healthy we eat or how much we exercise), and endocrine disruptors.

Health effects that result from exposure to phthalates depend on the timing of the exposure. Studies show that the fetus, young developing babies, and children are the most vulnerable. In particular, the developing male reproductive tract appears to be the most sensitive to phthalates.

These “everywhere” chemicals are not only impacting people, but every class of vertebrate animal, from fish to mammals. Scientists have been reporting worldwide hormone disrupting water pollution that is impacting our polar bears, birds, fish, alligators, turtles, frogs and deer!

Where do we find phthalates?

Phthalates are found in soft plastics as well as fragrance recipes. Remember, phthalates are considered an “everywhere chemical” and are used in hundreds of products - such as: water bottles, plastic food packaging, plastic and rubber tubing used by dairy farmers to milk animals, vinyl flooring, wallpaper, mini blinds, automotive plastics, plastic clothes like raincoats, footwear such as lightweight sandals, rubber shoes, clogs, and rubber boots, bath mats, shower curtains, PVC polyvinyl chloride plastics, car seats, flexible PVC coatings of electrical cables and electronic components, garden hoses, blood-storage containers, medical tubing, inflatable toys, soft plastic toys, and even in coatings in time-release pharmaceuticals and nutritional supplements. Like we said “everywhere chemicals!!”

Like BPA, studies show that food is the leading source of phthalate exposure. Phthalates are now being called “indirect” food additives. That’s because they easily escape from food processing equipment, food packaging, food preparation materials, PVC gloves used to prepare food, recycled cardboard food packaging, adhesives, and printing inks on packaging. They contaminate food at points all along the supply chain. Removing as many soft plastics that come into contact with food or water, quickly reduces the levels of phthalates in the body.

Studies show that phthalates are in the dust of 100% of American homes. As we've mentioned, the molecules in plastics are not bound tightly and interact with whatever is touching them. Soft plastic items throughout the house interact with the air and phthalates are released. The phthalates, which are odorless SVOCs, then attach to and ride on dust. That is why removing dust is one of our best ways to reduce exposure.

Tossing Phthalates

So let's talk about some practical ways we can toss and reduce phthalates, starting with our food and drinks.

Toss all plastic water bottles - Drink and store water in glass.

Toss all leftover plastic food containers and switch to glass or stainless steel. You don't have to buy expensive containers. You can save glass jars from pasta sauces and other products.

Toss plastic wraps. There are great alternatives for plastic wrap, many of which are reusable. Like Bees wrap, silicone stretch wrap, unbleached wax paper, cellophane bags, and food-safe silicone storage bags. Check out our resource section for more details.

And know that if a plastic wrap or bag has a label that says BPA free that it's just a marketing ploy to draw customers in. BPA is only in hard plastics, there never would be BPA in a plastic wrap or ziplock bag.

Buy as many foods and oils in glass containers. More and more companies are offering products in glass.

Eat organic to help avoid phthalates in your diet! Many pesticides contain phthalates.

Toss your plastic cutting boards and replace with wood.

Reduce consumption of fast foods and eating out. Gloves used in handling food, food processing equipment, fast food containers, and other items used in the production of restaurant, cafeteria and fast food meals have phthalates. A 2018 study compared phthalate levels in people who ate home-cooked meals with fresh foods to those who frequently dined out. Those who ate out had nearly 35 percent higher levels of phthalates. You can limit exposure to phthalates by preparing more fresh foods at home - it is a win-win!

We can also toss and reduce phthalates throughout our homes.

Outside of the kitchen, one of the best ways to reduce exposure to phthalates is to toss or reduce vinyl products and soft plastic items where you can. We know realistically it's impossible to fully toss all plastics, but thankfully we can take steps to lower and mitigate our contact with phthalates.

A big contributor to the phthalate load in your home can be a new vinyl shower curtain. Think about that strong “new shower curtain smell” - It’s made up of VOCs from over 100 toxic chemicals, including phthalates. Remember the 6 factors that accelerate the release of chemicals from plastics? When we take a hot shower in a bathroom with a vinyl shower curtain, we are increasing the outgassing of the VOCs as well as phthalates. Toss that shower curtain right away. Just go into your bathroom and remove it from your home. But you might say - but my vinyl shower curtain doesn’t smell anymore! That is because the VOCs have outgassed BUT even after that new smell is gone, the phthalates, which are an odorless SVOC, keep on outgassing throughout the curtain’s life.

Replace vinyl shower curtains with natural, untreated fibers like hemp, linen, cotton or a glass door. Nylon, which is naturally mold resistant is quick to dry and very durable. Avoid liners and curtains with added biocide or mildewcide protection.

Vinyl flooring is made of PVC (polyvinyl chloride) plastic which is rigid and brittle and phthalates are used to add flexibility. Due to the negative press on phthalates and consumer pressure there are many vinyl floor companies declaring that their floors are phthalate free. BUT they are replacing phthalates with other chemicals that are toxic. It’s best to avoid all together; however, if you already have vinyl floors in your home, remember phthalates ride on dust so HEPA vacuum and damp mop on a regular basis to reduce the phthalates and other SVOCs that accumulate in the dust. Also, be aware that direct sunlight, moisture and heat on **vinyl flooring** causes it to **release phthalates** more quickly. Cover the flooring with an area rug or mat before allowing children to crawl on it. Replace the flooring when able.

If you have vinyl wallpaper, consider removing and replacing it with untreated papers. Meanwhile, HEPA vacuum the area and damp wipe the walls and room often to remove the dust containing phthalates that the wallpaper releases.

Vinyl mini blinds are another source. Heat from the sun shining through windows increases the outgassing of phthalates and other chemicals in vinyl blinds. HEPA vacuum and damp wipe routinely. When you’re able - replace them. Inexpensive temporary paper shades called Redi Shades can be a great way to cover windows until you can purchase more permanent replacements.

Other home items to remove include vinyl diaper changing mats, vinyl school supplies, and any soft plastic toys.

Levels of phthalates in school supplies are actually much higher than the phthalate levels allowed in toys. Avoid vinyl backpacks, plastic notebook binders and lunch boxes. Look for more natural materials such as canvas, paperboard, and uncoated paper.

Because of their hand-to-mouth behaviors, babies are uniquely vulnerable to phthalate exposures from soft plastic toys. Ideally, replace soft plastic toys with ones made of natural materials like solid wood or cloth. See our resources for plastic free suggestions.

We understand this can feel overwhelming, but remember that the removal of soft plastics results in quick reduction of phthalate levels in the body. We just don't know how much these chemicals impact us until we remove them!