

THE IMPACT OF PHTHALATES *on Diabetes*

What are Phthalates?

Phthalates are a group of chemicals known as non-persistent organic pollutants. They are commonly used in plastics and can even be found in processed foods, food packaging, fragrances, home goods, as well as, skin care products. These pollutants can impact our hormones and disrupt our natural biological processes.

How do they Cause Diabetes?

Diabetes is increasing worldwide and environmental pollutants such as phthalates can contribute to disease progression. Phthalates poison our insulin receptor sites and damage the pancreatic cells that secrete insulin. These damaged insulin sites result in a decreased regulation of glucose throughout the body.



Ways to Avoid Exposure

Exposure to phthalates can come from plastics found in processed foods, food packaging, water bottles, toothbrushes, shower curtains, fragrances, synthetic candles, air fresheners, cosmetics, automobile parts, tools, plastic toys, vinyl flooring and even aspirin. To avoid exposure, opt for organic, whole foods in glass or paper packaging and try to avoid synthetic materials in everyday household products.

Helpful Swaps

Plastic Water Bottles	→	Glass or Stainless Steel Jars
Plastic Food Storage	→	Glass Storage Containers
Vinyl Flooring	→	Wood Flooring
Fragrances	→	Essential Oils
Plastic Toothbrushes	→	Bamboo Toothbrushes
Plastic Shower Curtains	→	Cotton Shower Curtains
Synthetic Candles	→	Beeswax Candles
Synthetic Cosmetics	→	Plant Derived Cosmetics

Ways to Detoxify

exercise and movement to increase sweating

increase fluid intake

increase fiber intake for regular bowel movements

meditation and prayer

oral, topical or intravenous Glutathione

F.I.N.E. Health: PHTHALATES

Phthalates are

Main sources of exposure to Phthalates

- Plastic and Vinyl
- Personal Care Products including soap, fragrance, shampoo, conditioners, cosmetics, menstrual pads/ diapers, nailpolish
- Plastic food containers, household plastic items
- Building materials including vinyl flooring and adhesives

What does it do to the body?

The effects disrupt the endocrine system by increasing the production of some hormones, decreasing the production of others, and interfering with hormone signaling:

- Diabetes
- Fertility issues, early puberty, low birth weight
- Cardiovascular and respiratory problems
- Cancers, neurological, and behavioral problems

Ways to minimize exposure

The best way to reduce risk of exposure to Pthalates is by changing products:

- Nail polish. Dibutyl phthalate is a chemical often added to nail polish to make it chip-resistant. Look for this ingredient on the label of the polish. It may be shortened to DBP.
- Fragrance. Diethyl phthalate is frequently used as part of the “fragrance” in some products. It won’t be listed separately, so you’re better off choosing personal care products and cleaners that don’t have the word “fragrance” on the ingredient list.
- Kitchen plastics. Phthalates may be found in many plastic items in your kitchen. They’re more likely to leach out of plastic when it’s heated, so avoid cooking or microwaving in plastic containers, whenever possible.
- Vinyl toys. Phthalates are used to make PVC (vinyl) toys soft. Avoid giving these to your children and instead opt for toys made of wood and other materials.
- Paint. Craft paints may contain phthalates as solvents. Be sure to use these products in well-ventilated areas.

- Vinyl. Vinyl isn't only found in children's toys. It's used in many consumer products, including lawn furniture, garden hoses, building materials like flooring and items of clothing. In addition to carefully choosing products that don't use vinyl, one easy change you can make is switching to a non-vinyl shower curtain.
- Air fresheners. Just like fragrance in your personal care products, most air fresheners contain phthalates. Avoiding these products can help you avoid a source of exposure.

You can also consult EWG's Skin Deep® cosmetics database and Guide to Healthy Cleaning to find personal care and cleaning products free from phthalates and undisclosed fragrance ingredients.