



Let's Take Off the Toxic Gloves!

Researchers found toxic chemicals called phthalates (THAL-eights) in some vinyl plastic gloves used to handle and serve food at popular restaurants. These chemicals can leach into food upon contact—and food is most Americans' top route of exposure to phthalates.

- ◎ **Over two-thirds** of fast food restaurants surveyed used vinyl gloves
- ◎ **One out of seven** vinyl gloves tested contained phthalates
- ◎ **One-third** of the top glove distributors sold some gloves with phthalates



What do we recommend for restaurants, grocery delis, school cafeterias and other food service glove users?

- 1) It's simple. When handling food, replace vinyl gloves with polyethylene gloves, a safer alternative that's widely available, effective, and affordable.
- 2) Consider whether gloves are necessary. We recommend that food service workers frequently and thoroughly wash their hands with soap and water.

Phthalates in Food Threaten Human Health

Phthalates exposure in utero is linked to genital malformations in baby boys, infertility later in life, and ADHD diagnoses in children,¹ and over 750,000 women of childbearing age are exposed to dangerous levels of phthalates each day in the U.S.²

For most Americans, food is the top route of phthalates exposure. Recent research also found that dining out, particularly dining out at fast food restaurants, is associated with higher levels of phthalates exposure.³



Ranking of Safer Choices for Food Service Gloves

Glove material for food handling	ACTION	Rationale	Potential of Chemicals to Migrate	Hazards of Production Chemicals
1. NONE (no gloves)	PREFER (unless not allowed)	Frequent and proper hand-washing with soap and water works to prevent food-borne illnesses.	LOW	LOW
2. Polyethylene	PREFER	In terms of chemical hazards, this is the best glove material across its lifecycle with no plasticizer chemicals.	LOW	LOW
3. Nitrile	USE (but seek alternative)	Nitrile is preferable to vinyl and latex. However, polyethylene is preferable to reduce lifecycle hazards and prevent allergic reactions.	MED	MED to HIGH
4. Vinyl without phthalates	PHASE-OUT	Not possible to determine if gloves are phthalate-free. Also, alternative gloves eliminate exposure to all plasticizers and avoid lifecycle impacts.	HIGH	HIGH
5. Latex	AVOID	In some people, severe allergic reactions to latex proteins are life-threatening.	HIGH	NOT RATED
5. Vinyl with phthalates	AVOID	High hazards from a toxic class of chemical plasticizers and lifecycle impacts.	HIGH	HIGH

The **Coalition for Safer Food Processing & Packaging** is a national alliance of nonprofit organizations concerned about human health, food safety, and social justice who are working together to persuade major food manufacturers to identify and eliminate phthalates and other chemicals of high concern from the American food supply.



¹ U.S. Consumer Product Safety Commission (2014) Report by the Chronic Hazard Advisory Panel on Phthalates and Phthalate Alternatives. <https://www.cpsc.gov/s3fs-public/CHAP-REPORT-With-Appendices.pdf>; Ejaredar M, Nyanza EC, Ten Eycke K, Dewey D (2015) Phthalate exposure and children's neurodevelopment: A systematic review. *Environmental Research*. 142:51-60. <https://doi.org/10.1016/j.envres.2015.06.014>

² U.S. Consumer Product Safety Commission (2017) Estimated Phthalate Exposure and Risk to Women of Reproductive Age as Assessed Using 2013/2014 NHANES Biomonitoring Data. <https://www.cpsc.gov/s3fs-public/Estimated%20Phthalate%20Exposure%20and%20Risk%20to%20Women%20of%20Reproductive%20Age%20as%20Assessed%20Using%202013%202014%20NHANES%20Biomonitoring%20Data.pdf>

³ Varshavsky JR, Morello-Frosch R, Woodruff TJ, Zota AR. (2018) Dietary sources of cumulative phthalates exposure among the U.S. general population in NHANES 2005-2014. *Environment International*. 115:417-429. <https://doi.org/10.1016/j.envint.2018.02.029>