




## EXECUTIVE SUMMARY

***Q: Dining out can expose you and your family to toxic industrial chemicals used in some food-handling gloves. Which gloves contain toxic chemicals that can escape into your meal?***



***The Coalition for Safer Food Processing and Packaging, a national alliance of public health nonprofits, sampled and tested 123 plastic food service gloves from 32 top glove distributors and 15 popular restaurant chains in the U.S. in order to answer that question.***

### Our Findings

- Toxic chemicals known as *ortho*-phthalates, many of which have been shown to harm reproductive health and brain development, are still used in some vinyl (PVC) food-handling gloves in the U.S., despite being highly restricted in Europe and Japan and recently banned by the state of Maine

- ◎ **Over two-thirds** of fast food restaurants surveyed used vinyl gloves
- ◎ **One out of seven** vinyl gloves tested contained phthalates
- ◎ Some gloves from **McDonald's, Burger King** and **Wendy's** had phthalates
- ◎ **One-third** of the top glove distributors sold some gloves with phthalates

### ***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,<sup>1</sup> and over 750,000 women of childbearing age are exposed to dangerous levels of phthalates each day in the U.S.<sup>2</sup>

**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.<sup>3</sup>

- Any vinyl glove may contain phthalates due to poor global supply chain management and lack of transparency—there is no way to know without screening each glove
- More than 30% on average of each vinyl glove (by weight) is made up of chemical softeners, such as phthalates or DOTP, which can leach into your meal during food handling
- The four phthalates found in vinyl gloves included DEHP, which is widely banned globally, and DINP, DIDP and DPHP, which are poor substitutes for DEHP because similar concerns have been raised about known or possible hormone disruption. Scientists are also raising early warnings about the common phthalate alternative, known as DOTP (or DEHT), which we found in 6 out of 7 vinyl gloves tested
  - ⦿ Widespread human exposure to DOTP is expected to steadily increase
  - ⦿ New research suggests that DOTP may be a hormone-disrupting chemical
- **Safer alternatives are widely available** such as frequent hand-washing with soap and water, and gloves made of polyethylene plastic, which has no chemical softeners
  - ⦿ At **Panera Bread** and **Subway**, we found only polyethylene gloves in use
  - ⦿ At **Starbucks**, four out of five gloves tested were made of polyethylene

## Recommendations

Based on our findings, we strongly recommend that **U.S. restaurant chains should:**

1. Replace vinyl with polyethylene as the safest material for food service gloves
2. Adopt a safer food-contact chemicals policy based on food industry best practice
3. Take action to improve the sector's F grade in the annual [Retailer Report Card](#)

Further: **Grocery chains, school cafeterias** and **other institutions** should take similar actions to improve food safety from the use of plastic disposable food service gloves.

