Phasing-out PFAS in Food Packaging at Top Grocery and Fast-food Chains

April 20, 2021

Liz Hitchcock, Director
Safer Chemicals Healthy Families

No one's drinking water should be contaminated for Whopper wrappers!
How PFAS chemicals can move from food packaging to people and the environment.

PFAS chemicals move from food packaging:
- to landfills & compost
- to the environment
- to crops
- to food
- to people

Labels: TOXIC-FREE FUTURE, Mind the Store.
Early-life PFAS Exposure

- Early-life exposure may lead to adverse effects later in life
- Breastfeeding is an important exposure pathway
- The last two studies on PFAS in breast milk from the U.S. mothers date back to 2004
- More recent studies from Asia have reported build up of the current-use PFAS
PFAS in Breast Milk Study

- Recruited 50 first-time moms residing in and near Seattle, WA (2019)
- Outreach via parenting groups, social media, paper flyers
- Moms asked to manually express 50 ml into a provided glass container
- Researchers collected milk within 24 hours and maintained frozen until shipment for analysis
Results

- PFAS detected in 100% of samples
- 16 PFAS total detected, 12 PFAS detected in more than 50% of samples
- $\Sigma$PFAS ranged from 52 to 1,580 pg/mL
Summary

- Both current-use and legacy PFAS are now abundant in milk from US mothers.
- While levels for legacy PFAS are going down, the detection of the current-use short-chain PFAS is going up.
- Consistent biomonitoring of breast milk is needed to be able to detect changes in exposure patterns.
Messaging to New Moms

• Breastmilk is still best based on immune protection/reduced infection and associated with positive outcomes in newborns and infants

• There is no zero exposure

• Try to work on reducing overall environmental exposures
  • Fresh food diets
  • Take shoes off when entering home
  • Reduce processed food consumption
  • Use products low in toxic chemicals
Messaging to New Moms

- Currently, no evidence based guidelines to reduce exposures (in other words, no studies that show certain guidance will actually reduce exposure)

- Nevertheless, we do know about sources of exposure:
  - Stain repellants on carpets/clothing/fabrics
  - Grease or oil based packaging for foods like pizza
  - Some non-stick coatings on pans
Who’s Minding the Store?

NEW 5th annual report card on retailer actions to eliminate toxic chemicals

SELECT A RETAILER  TAKE ACTION
<table>
<thead>
<tr>
<th>Brand</th>
<th>Policy</th>
<th>Oversight</th>
<th>Accountability</th>
<th>Disclosure</th>
<th>Action</th>
<th>Solar Alternatives</th>
<th>Transparency</th>
<th>Chemical Footprint</th>
<th>Third-party Standards</th>
<th>Joint Announcement</th>
<th>Continuous Improvement</th>
<th>Collaboration</th>
<th>Impact Investment</th>
<th>Total Score</th>
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<tbody>
<tr>
<td>McDonald's</td>
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<td>2.5</td>
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<td>6</td>
<td>0</td>
<td>5</td>
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<td>D</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
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</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>2</td>
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<td>0</td>
<td>13.5</td>
<td>F</td>
</tr>
<tr>
<td>Office DEPOT</td>
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<td>2.5</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>7.5</td>
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<td>3</td>
<td>2.5</td>
<td>3</td>
<td>0</td>
<td>49.5</td>
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<td>Panera Bread</td>
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<td>5</td>
<td>7</td>
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<td>2</td>
<td>2.5</td>
<td>0</td>
<td>2.5</td>
<td>3</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>REI</td>
<td>13.75</td>
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<td>8.75</td>
<td>6</td>
<td>15</td>
<td>3.25</td>
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<td>0</td>
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<td>77</td>
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<td>Restaurant Brands</td>
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<td>2.5</td>
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<td>3</td>
<td>11.25</td>
<td>F</td>
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<td>RITE AID</td>
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<td>2.5</td>
<td>9.5</td>
<td>9.5</td>
<td>17</td>
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<td>85.25</td>
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</table>
Benchmarking and driving progress over time

<table>
<thead>
<tr>
<th>Retailers Graded for First Time</th>
<th>Number of Retailers</th>
<th>First Year Evaluated</th>
<th>Today</th>
</tr>
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<tbody>
<tr>
<td>Class of 2018</td>
<td>12</td>
<td>F</td>
<td>D−</td>
</tr>
<tr>
<td>Class of 2017</td>
<td>19</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td><strong>Class of 2016</strong></td>
<td><strong>11</strong></td>
<td><strong>D+</strong></td>
<td><strong>B−</strong></td>
</tr>
</tbody>
</table>
2018 report investigating PFAS in food packaging at top grocery chains

Store locations for collection:

20 stores in 12 states
### Results for “Take Out Toxics” report

<table>
<thead>
<tr>
<th>Item category</th>
<th>Ahold Delhaize</th>
<th>Albertsons</th>
<th>Kroger</th>
<th>Trader Joe’s</th>
<th>Whole Foods (Amazon)</th>
<th>TOTAL BY PRODUCT CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-out container</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery or deli paper</td>
<td>1/6</td>
<td>1/7</td>
<td>1/11</td>
<td>0/6</td>
<td>1/8</td>
<td>4/38</td>
</tr>
<tr>
<td>Single-use plate</td>
<td>1/3</td>
<td>0/2</td>
<td>0/1</td>
<td>0/1</td>
<td></td>
<td>1/7</td>
</tr>
<tr>
<td>Tray for cook-at-home food</td>
<td>0/1</td>
<td>0/1</td>
<td>0/1</td>
<td>0/3</td>
<td>0/2</td>
<td>0/8</td>
</tr>
<tr>
<td>Baking or cooking supplies</td>
<td>0/4</td>
<td>0/5</td>
<td>0/4</td>
<td>0/2</td>
<td>0/2</td>
<td>0/17</td>
</tr>
<tr>
<td>TOTAL BY RETAILER</td>
<td>2/14</td>
<td>1/17</td>
<td>2/18</td>
<td>0/12</td>
<td>5/17</td>
<td>10/78</td>
</tr>
</tbody>
</table>
• PFAS in food packaging
  • First major North American grocery chain to publicly commit to remove PFAS from some food packaging, including take-out containers and deli/bakery paper
  • Impacts ~ 100 million takeout food containers/year
  • Rolled out molded fiber plates and bowls in all prepared foods departments in the U.S. and Canada that do not rely on PFAS
  • Discontinued or reformulated any food service packaging where it was disclosed or determined that PFAS may have been intentionally added
Trader Joe’s is asking its vendors to avoid the use of Per- and polyfluoroalkyl substances (PFAS) in packaging for our products.” (Bloomberg News story)

Launched a chemicals policy in the U.S. (Food Lion, Stop & Shop, Giant, and Hannaford)

Three key chemical classes (as well as other chemicals of concern)
- PFAS
- ortho-phthalates
- Bisphenols
• Announced new **global sustainable packaging commitments**
• **Ban PFAS, phthalates and BPA from “consumer-facing packaging”**
• 2025 timeline
• First major fast-food chain to announce such a commitment
Nearly half of tested food packaging items likely contained PFAS chemicals

<table>
<thead>
<tr>
<th>Number of samples that tested above the fluorine screening level out of the total number tested in each category</th>
<th>Burger or sandwich</th>
<th>Fries, other fried items, or desserts</th>
<th>Salads, warm bowls, or other meals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WRAPPER</td>
<td>CARDBOARD CONTAINER</td>
<td>PAPER BAG</td>
</tr>
<tr>
<td><strong>Burger King</strong></td>
<td>7,000+ (^1) stores</td>
<td>3 out of 8</td>
<td>□□□</td>
</tr>
<tr>
<td><strong>McDonald’s</strong></td>
<td>15,000+ (^1) stores</td>
<td>3 out of 9</td>
<td>□□□</td>
</tr>
<tr>
<td><strong>Wendy’s</strong></td>
<td>6,000+ (^2) stores</td>
<td>1 out of 4</td>
<td>□□</td>
</tr>
<tr>
<td><strong>CAVA</strong></td>
<td>100+ (^1) stores</td>
<td>4 out of 4</td>
<td></td>
</tr>
<tr>
<td><strong>freshii</strong></td>
<td>300+ (^1) stores</td>
<td>1 out of 2</td>
<td></td>
</tr>
<tr>
<td><strong>sweetgreen</strong></td>
<td>100+ (^2) stores</td>
<td>2 out of 2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>14 out of 29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{1}\) Number of stores in the U.S. and Canada.

\(^{2}\) We collected and tested more than one of the same kind of wrapper or bowl from different locations in the U.S., but are reporting each set as 1 to reflect the number of unique items. For details, see our methodology page.
Positive tests: burger chains
Positive tests: health-conscious chains
MTS detailed step-by-step guidance for retailers

A Guide for Grocery Chains: Banning PFAS in food-contact materials

A Guide for Quick-Service Restaurant Chains: Banning PFAS in food-contact materials

Online at MindTheStore.org
# PFAS-free Paper Food Packaging Alternatives

Many alternatives exist for paper food packaging and food serviceware products that do not contain intentionally added PFAS chemicals, and more are under development. This chart gives a sample of products on the market as of September 2020.

## Made From

### Paper – Uncoated
- AJM Packaging Nature’s Own Green Label
- GP Pro Dixie Uncoated White Paper Plates

### Paper with Clay Coating
- Dixie Pathways Paper Plates
- Emerald Farm To Paper Compostable Select Design Plates

### Paper with Petroleum-Based Plastic Coating
- Dixie Pathways Paper Plates with Soak-Proof Shield
- Dixie Ultra With Soak-Proof Shield Plates

### Paper with Bio-plastic Coating
- Dixie Pathways Paper Plates
- Eco-Products Evolution Soup Cups

### Bioplastic (PLA) – Foamed
- Anhui Hengsan Foam PLA Plates
- Earth Maize Foam PLA Plates

### Bioplastic – PLA or similar
- Anhui Hengsan Clear PLA Plates
- Eco-Products PLA Plates

### Molded Fiber with Bioplastic Lining
- Eco-Products Vanguard Line Plates
- Footprint Café Market Plates

## Made From

### Dinner Wraps, Bakery & Fast Food Bags
- Eco-Products Eco-Craft Interfolded Dinner Paper
- Food Wraps 100% Bio-Poly (plastic-free)

## Resources on alternatives
<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TYPE</th>
<th>MATERIAL</th>
<th>BPI CERTIFIED COMPOSTABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asean Corp. Stalk Market Food Containers</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA lining</td>
<td>Yes</td>
</tr>
<tr>
<td>AJM Packaging Corp. Nature's Own Green Label paper plates</td>
<td>Plates</td>
<td>Paper - uncoated</td>
<td>No</td>
</tr>
<tr>
<td>AmerCareRoyal PrimeWare Food Containers</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA lining</td>
<td>Yes</td>
</tr>
<tr>
<td>Anhui Hengxin Clear Salad Bowl</td>
<td>Bowls, Clear Salad</td>
<td>PLA - clear</td>
<td>Yes</td>
</tr>
<tr>
<td>Anhui Hengxin Trays (single compartment)</td>
<td>School Lunch Trays</td>
<td>PLA - foamed</td>
<td>Yes</td>
</tr>
<tr>
<td>Anhui Hengxin Foam PLA Plates</td>
<td>Plates</td>
<td>PLA - foamed</td>
<td>Yes</td>
</tr>
<tr>
<td>Anhui Hengxin Foam PLA Tray (hinged)</td>
<td>Clamshells/Hinged Containers</td>
<td>PLA - foamed</td>
<td>Yes</td>
</tr>
<tr>
<td>Asean Corp. Stalk Market Jaya Line</td>
<td>Bowls, Clear Salad</td>
<td>PLA - clear</td>
<td>Yes</td>
</tr>
<tr>
<td>Asean Corp. Stalk Market Jaya Line Hinged Deli Box</td>
<td>Clamshells/Hinged Containers</td>
<td>PLA - clear</td>
<td>Yes</td>
</tr>
<tr>
<td>Bamboo Studio Palm Leaf Plates</td>
<td>Plates</td>
<td>Palm leaf</td>
<td>No</td>
</tr>
<tr>
<td>Bambu Veneeware Compostable Plates</td>
<td>Plates</td>
<td>Bamboo</td>
<td>No</td>
</tr>
<tr>
<td>Besics Compostables Bowl</td>
<td>Bowls</td>
<td>PLA</td>
<td>Yes</td>
</tr>
<tr>
<td>Besics Compostables Soup Cup</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA or similar bioplastic lining</td>
<td>Yes</td>
</tr>
<tr>
<td>Better Earth Hot and Cold Food Containers</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA or similar bioplastic lining</td>
<td>Yes</td>
</tr>
<tr>
<td>Bio-Sposables Soup Bowl</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA or similar bioplastic lining</td>
<td>Yes</td>
</tr>
<tr>
<td>Biodegradable Food Service Earth Bowl</td>
<td>Bowls, Soup Cup</td>
<td>Paper - PLA lining</td>
<td>Yes</td>
</tr>
</tbody>
</table>
• Started offering PFAS-free bowls in San Francisco bay area to comply with SF law
• Phasing out PFAS in compostable bowls by the end of 2020 in all stores
• Phasing PFAS out of molded fiber bowls by the end of 2020
• Eliminating PFAS from kids’ trays by end of 2021

• Phasing PFAS out by mid 2021

• Phasing PFAS out by mid 2021
Two all-beef patties, special sauce, lettuce, cheese, pickles, onions... and toxic chemicals?

McDonald's: Stop using packaging that contaminates drinking water!

TELL MCDONALD'S: Get PFAS chemicals out of your packaging!
We did it!
McDonald's bans PFAS chemicals from its packaging!
Other recent retailer policy commitments

• New food packaging RSL restricts PFAS in private brand food packaging

• Begun to replace PFAS in some food packaging with alternatives

• Has a packaging RSL that restricts PFAS, bisphenols, and phthalates
• Eliminated PFAS in almost all to-go food packaging
Other recent retailer policy commitments (continued)

- Banning PFAS in corporate office cafeterias

- Rite Aid expanded chemicals policy to food packaging – launched a RSL restricting PFAS
  - First pharmacy chain to make such a commitment
Retail commitments, by the numbers

• 27 retailers adopted policies on PFAS
  • 71,000 stores
  • $307 billion in sales
What about Burger King and other retailers?
INTRODUCING: POLLUTED POLLY!
Polly’s had enough!
Cities and states enact bans on PFAS in food packaging

Washington Approves First-in-Nation Ban on Nonstick “PFAS” Chemicals in Food Packaging
Bill Goes to Governor Inslee for Signature

Bill to ban ‘forever chemicals’ in food packaging headed to Mills’ desk
The bill would allow the Maine Department of Environmental Protection to prohibit use of PFAS and phthalates in food packaging as early as January 2022.

State of New York to ban PFAS in food packaging
House and Senate chambers both pass legislation, set to ban use of per- and polyfluoroalkyl substances (PFAS) in food packaging starting in 2023; legislation sent to state governor for signature into law
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More state action on the horizon

Learn more at SaferStates.org
Polluted Polly goes to Washington
Federal legislation on the horizon

Press Releases

Dingell Bill to Ban PFAS in Food Containers & Cookware Receives Key Hearing

Washington, January 29, 2020
Tags: Great Lakes and the Environment, Environment & Climate Change

WASHINGTON, DC – Today, the Energy and Commerce Committee’s health subcommittee held a hearing on Congresswoman Debbie Dingell’s (D-MI) legislation to ban the use of toxic perfluorinated compounds (PFAS) in food containers and cookware.

“PFAS are toxic, forever chemicals that are everywhere – including food containers and non-stick cookware and countless other everyday products,” said Dingell. “Just this week, the city of Ann Arbor found high levels of PFAS in and around the compost facility likely due in part to the presence of food containers containing PFAS. This issue is here, it is threatening public health and our environment now, and we need to act. My important legislation ensures unsafe, hazardous chemicals are not allowed near the food we eat.”

Video of Congresswoman Dingell at Wednesday’s hearing is available here.

Recent attention has focused on PFAS in ground water and the environment. These harmful substances are frequently used to greaseproof, waterproof, and give nonstick properties to food containers, cookware, and consumer products. The Environmental Working Group found that as many as 40 percent of fast food wrappers and paper products tested positive for fluorine chemicals. Peer-reviewed studies found that PFAS chemicals in food containers can contaminate food. PFAS chemicals have been linked to liver disease, thyroid dysfunction, and several forms of cancer.

Dingell’s Keep Food Containers Safe from PFAS Act empowers the Food and Drug Administration (FDA) to deem PFAS substances in any food containers or cookware as unsafe. The bill gives the FDA until 2022 to enforce this ban. The text of the bill is available here.

Dingell leads efforts in Congress to combat and address PFAS contamination. In early January, the House of Representatives passed bipartisan legislation led by Dingell that comprehensively
Thank you!

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MindTheStore.org
RetailerReportCard.com

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