STUDY LINKS EXPOSURE TO HOUSEHOLD CHEMICALS TO **DECREASED GUT HEALTH IN** CHILDREN

Toxic chemicals are all around us and many people bring them into their homes unknowingly exposing themselves and their children without realizing the damage they cause. A recent study indicates that increased exposure to household chemicals decreased gut health in children. (1)

We have talked extensively on how these chemicals are linked to asthma, developmental delays, cancers, ADHD, hormonal issues, and other concerns. The more toxins you are exposed to the more potential for harm and that raises concerns as to what that means for growing children.

This recent finding is another look at the risks for children (and adults too) who have increased exposure to common household chemicals. A healthy gut is critical for overall health and is one of the first steps I encourage no matter where you are on your health journey. Your body is like a Swiss watch (https://www.thewellnessway.com/when-your-symptoms-are-wrong-the-swiss-watchprinciple-explained/) and the gut plays an important part in digestion, immunity, creation of neurotransmitters, and many metabolic processes. A healthy gut means a rich and diverse microbiome that includes hundreds of different species of bacteria and flora. Common household chemicals could be disrupting gut health.

For the first time researchers have found a connection between household chemicals and the gut microbiome. During the study researchers measured blood and urine samples of 69 young children for common semi-volatile organic compounds including PFASs (polyfluoroalkyl substances) and

phthalates. They found that the children who had higher levels of these compounds, indicating more exposure, also had less diverse microbiomes. (1)

THE HARMFUL CHEMICALS LINKED TO GUT **MICROBIOME**

PFASS

Those with higher levels of PFASs had fewer types and amounts of bacteria. PFASs are very persistent and known as "forever chemicals" because their chemical bond is strong, and they are hard to break down. They are also useful for repelling oil and water, so they are used in a number of products such as carpeting, cookware, furniture, clothing, and a number of other consumer products. Because they are common and don't break down, they also contaminate our water and air.

PHTHALATES

Those with higher levels of phthalates had fewer fungi making up their gut flora. Phthalates are plasticizing agents used in many plastics (think toys and other items your kids use) and personal care products like shampoo, lotion, and sunscreen. They are also endocrine disruptors that have been linked to early puberty, low sperm count, and other hormonal changes. And now they have been linked to disrupting the health of the gut microbiome.

These chemicals are commonly used so how do we reduce exposure to our families?

HOW TO REDUCE EXPOSURE TO CHEMICALS

1) CHECK PERSONAL CARE PRODUCTS AND CLEANERS

Upgrade personal care products that may contain toxic chemicals. Common ones include shampoo (https://www.thewellnessway.com/cleaner-hair-products/), sunscreens

(https://www.thewellnessway.com/sunscreen-choices/), soaps, lotions

(https://www.thewellnessway.com/naturally-soft-skin/), and others that you use regularly. Start with the items that you use most frequently if you are overwhelmed by how many products these chemicals are in. Also look at household cleaners and laundry detergents.

(https://www.thewellnessway.com/natural-laundry-detergent/) Anything with the word fragrance has the potential to also include phthalates.

2) AVOID STAIN-RESISTANT AND WATER-RESISTANT MATERIALS

These materials often use PFASs and are found in clothing, carpets, and furniture. Yes, they might make life more convenient (especially when you have kids!) but they also make life more toxic.

3) SKIP THE DRIVE-THRU

One study found that those who ate out more often had 35% higher levels of phthalates as we noted in the toxic exposure of eating out (https://www.thewellnessway.com/toxic-eating-out/). (2) It's not worth the convenience! Spend a little more time and preparation to cook healthy meals at home to avoid the side of plastic with your food. And eating at home more will make the next tip even more worthwhile.

4) UPGRADE YOUR COOKWARE

Heat can release chemicals into your food so avoid plastic and nonstick cookware. If you are using nonstick cookware, then you may be exposing your family to PFASs and phthalates every time you cook a meal. Changing to healthier cookware is a step to reducing your exposure and cookware lasts a long time. There are multiple options, and you can check out some of our favorites in this article on upgrading your cookware (https://www.thewellnessway.com/healthy-cookware-upgrade/).

5) INVEST IN A GOOD WATER FILTER

Microplastics are everywhere including our drinking water. PFASs and Phthalates are persistent so invest in a good water filter that removes small particles. Not just your regular old refrigerator filter. Try a countertop one like Berkey or a whole house system.

6) DON'T USE PLASTIC WATER BOTTLES

Speaking of microplastics, those who drink out of a plastic water bottle double their ingestion of microplastics. (3) The plastic from water bottles leaches into your water. Buy a quality glass or stainless-steel water bottle that you can refill with good, filtered water.

EXPOSURE TO HOUSEHOLD CHEMICALS AND **YOUR GUT**

Studies have linked these toxic chemicals to numerous health risks for years. Now we are learning more about how those chemicals can disrupt our health and there is so much more to know. Protect the health of your family by reducing your exposure and finding ways to support your body so it can handle the toxins you can't avoid.

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RESOURCES:

- 1. https://pubs.acs.org/doi/10.1021/acs.estlett.0c00776 (https://pubs.acs.org/doi/10.1021/acs.estlett.0c00776)
- 2. https://www.sciencedirect.com/science/article/pii/S0160412017314666 (https://www.sciencedirect.com/science/article/pii/S0160412017314666)
- 3. http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/14_03_13_finalbottled.pdf (http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/14_03_13_finalbottled.pdf)