



PFAS

in Personal Care Products: What You Need to Know

Per- and Polyfluoroalkyl Substances (PFAS) are a group of human-made chemicals that build up over time in the environment, animals, and humans; and can be harmful to health. Understanding which products are likely to contain PFAS and how to avoid buying them helps reduce your personal exposure and decreases the amount of PFAS entering the environment and drinking water supplies. For an introduction to PFAS, read the *"What are PFAS & Why Should I Care?"** factsheet.

Many personal care products include PFAS to achieve durability and water-resistant and oil-resistant qualities. Products that might contain PFAS include:

- Cosmetics
- Sunscreen & body lotion
- Dental floss
- Nail polish
- Hair care products
- Cleansers & shaving cream

Rules-of-Thumb

In general, items making the following claims are likely to contain PFAS:

- *Waterproof, water-resistant, or water-repellent*
- *Long-lasting cosmetics such as mascara, nail polish, and sunscreen*

Personal care products can lead to direct consumption of PFAS when used in and around the mouth. When PFAS-containing cosmetics and other personal care products are used, they get washed down the drain and pollute the discharged water. If you have a septic system, the wastewater is discharged below ground and can contaminate the groundwater. If your home is on a sewer system, the treatment plant cannot remove PFAS and it enters the environment.

PFAS from personal care products primarily contribute to human exposure from:

- Drinking water that is impacted from washing off personal care products
- Direct consumption of PFAS by placing products in and near your mouth



Ingestion Concerns

Scientists are concerned about PFAS in personal care products because we don't know the health effects of long-term, low-level PFAS exposure. Floss, lipstick, and other products used around the mouth can lead to direct consumption of PFAS.

Many types of cosmetics contain PFAS including foundation, mascara, lip products, concealer, and eye products. PFAS are added to increase durability and smoothness, achieve waterproof qualities, and change product texture. A study* conducted by the Harvard School of Public Health found 75% of waterproof mascaras, 66% of foundations and liquid lipsticks and more than 50% of eye and lip products they tested each contained at least four PFAS.

PFAS in Sunscreen

Two PFAS formulations commonly found in sunscreens are "PAP" (polyfluoroalkyl phosphate esters) and "PTFE" (polytetrafluoroethylene). Read the ingredients on the label to avoid PFAS!

Like cosmetics, sunscreen frequently contains PFAS to increase its water resistance and durability against sweat.

A study* of PFAS in cosmetics conducted by the Danish Environmental Protection Agency found sunscreen had the highest PFAS concentrations of all the products they tested. Both mineral and chemical-based sunscreens can contain PFAS. The potential health impact from the application of PFAS-containing products on the skin is unclear and more study is needed.

Coated dental floss can contain PFAS to increase the water-resistant qualities and increase durability and slickness. PFAS can enter saliva and be swallowed leading to direct exposure. One study* found 33% of the floss the researchers tested was positive for PFAS.



*Visit <https://www.newmoa.org/pfas-in-consumer-products-factsheets/> for more information, including links to the mentioned studies



WHAT YOU CAN DO

- Choose sunscreens and cosmetics without PFAS, especially avoid "PAP" (polyfluoroalkyl phosphate esters) and "PTFE" (polytetrafluoroethylene)
 - Avoid products with ingredients containing "fluoro" in the name, this denotes a type of PFAS
- Avoid waterproof and water-resistant cosmetics as they likely contain PFAS
- Choose PFAS-free floss
 - Uncoated natural fiber floss
 - Waxed flosses and refillable floss picks that tested negative for PFAS in the study: https://www.mamavation.com/beauty/toxic-pfas-dental-floss-tooth-floss.html#Best_Tooth_Floss_Brands
- Consider pressurized water flossing to limit chance of PFAS exposure and reduce single-use waste



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