

# Researchers find phthalates in wide variety of fast foods

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A team of researchers from The George Washington University Milken Institute School of Public Health, the Southwest Research Institute and the Chan School of Public Health, has found phthalates in a wide variety

of fast foods. In their paper published in *Journal of Exposure Science and Environmental Epidemiology*, the group describes how they collected samples of fast food from several restaurants and tested them for phthalates and other chemicals meant to replace them—and what they found.

Phthalates are esters of phthalic acid and are commonly used to make [plastic](#) substances more flexible. Prior research has shown that they can also increase durability and longevity making them popular for plastics makers. Researchers have found that consumption of phthalates can disrupt the endocrine system and by extension levels of hormones in the body. Research has also shown that they can lead to asthma in children and increased obesity.

In this new effort, the researchers built on prior work they conducted looking at urine samples of volunteers where they found that those who ate more [fast food](#), tended to have more phthalates in their system. To learn more about the link between fast [food](#) and [phthalate](#) levels, the researchers visited six [fast food restaurants](#) in and around San Antonio, Texas, and collected 64 [food items](#) to be used as test samples. They also asked for a pair of the plastic gloves that were used by food preparers at the same establishments and obtained three of them.

In studying the food samples, the researchers found DnBP in 81% of the samples and DEHP in 70% of them. They also noted that the foods with the highest concentrations of phthalates were meat-based, such as cheeseburgers or burritos. The team also found DINCH, DEHT and DEHA, chemicals that have begun replacing phthalates in many of the samples they collected. They note that it is not known if such replacements are harmful to humans if ingested.

The researchers did not attempt to find out how the phthalates were making their way into the fast foods but suspect it is likely from residue

on rubber gloves used by cooks who prepare them. It is also possible, they note, that they are coming from plastic packaging.

**More information:** Lariah Edwards et al, Phthalate and novel plasticizer concentrations in food items from U.S. fast food chains: a preliminary analysis, *Journal of Exposure Science & Environmental Epidemiology* (2021). [DOI: 10.1038/s41370-021-00392-8](https://doi.org/10.1038/s41370-021-00392-8)

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