

Exposure to harmful phthalates from processed foods and soft drinks

April 16 2015

University of Adelaide researchers have found another important reason to avoid some processed foods with the discovery of a link between an unhealthy diet and exposure to potentially harmful chemicals – phthalates – that are used in common plastic food wrappings.

Academics from the Freemasons Foundation Centre for Men's Health in the University's School of Medicine conducted the first population study to investigate the association between socio-demographic status, lifestyle factors, [dietary patterns](#) and exposure of [phthalates](#) (a group of chemicals used in plastic) in Australian men. The research is published in the journal *PLOS ONE*.

PhD student Peter Bai says while people are exposed to phthalates ubiquitously, diet was considered as the major contributor in the amount of [phthalate exposure](#) according to a number of international studies conducted in US, Europe, Canada and Asia.

"Phthalates are widely used in a variety of industrial and consumer products to increase the transparency, flexibility and durability of plastic. They are also used in [personal care products](#), medical devices, medications and [dietary supplements](#)," says Mr Bai, lead author on the paper.

"Phthalates were detected in 99.6% of the study participants, demonstrating that there is high exposure to the chemicals in urban South Australia, and this is probably representative of all urban

Australian areas.

"We didn't find a difference in the levels of phthalates detected according to socio-demographic status; however, participants who ate less fresh fruit and vegetables and more processed and packaged foods, and drank carbonated soft drinks, had higher levels of phthalates in their urine," he says.

Senior Research Fellow Dr Zumin Shi says while we don't yet know exactly what effect phthalates have on the body, we do know the chemicals impact the endocrine system.

"In recent times, there have been increased concerns from the public about phthalates and an association with detrimental health effects such as obesity, diabetes and cardiovascular disease," says Dr Shi. "And in this study we found that phthalates are associated with obesity."

"Clearly more research is needed into the health effects of phthalates," he says.

Mr Bai says the best way to limit exposure to phthalates is to consume more fresh vegetables, fruit, nuts and fish, and less high fat, packaged and [processed foods](#).

"The primary pathway for phthalates [exposure](#) is through consuming contaminated food, which is why diet is so important. Phthalates can also be absorbed by inhalation of air or dust containing the chemicals, and through the skin, but the exposure is a lot less than if it is consumed," says Mr Bai.

Provided by University of Adelaide

Citation: Exposure to harmful phthalates from processed foods and soft drinks (2015, April 16)
retrieved 25 April 2024 from <https://phys.org/news/2015-04-exposure-phthalates-foods-soft.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.