

Global Food System as a Transport Pathway for Hazardous Chemicals: The Missing Link Between Emissions and Exposure

STUDIES, PRODUCTS OF INTEREST

By LANA BECKETT, February 23, 2017

A study by Carla Ng and Natalie von Goetz, published in **Environmental Health Perspectives**¹⁾, found that food is a pathway for human exposure to hazardous chemicals.

The modern food system is becoming increasingly complex and globalized, but models for food-borne exposure typically assume locally derived diets or use concentrations directly measured in foods without accounting for food origin. Such approaches may not reflect actual chemical intakes because concentrations depend on food origin, and representative analysis is seldom available. Processing, packaging, storage, and transportation also impart different chemicals to food and are not yet adequately addressed. Thus, the link between environmental emissions and realistic human exposure is effectively broken.

Their conclusion is that a comprehensive approach that takes into account the complexity of the modern global food system is essential to enable better prediction of human exposure to chemicals in food, sound risk assessments, and more focused risk abatement strategies.

Resources for this article

1. Environmental Health Perspectives

<https://ehp.niehs.nih.gov/EHP168/>