

Experts say endocrine-disrupting chemicals pose global health threat

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In an editorial published in *Endocrinology*, a journal of The Endocrine Society, endocrine experts agreed that endocrine-disrupting chemicals (EDCs) pose a threat to human health and to the ecosystems of the earth. The editorial comes in response to a commentary (Dietrich et al. *Chem Biol Interact*) signed by a number of editors of toxicology journals that dismisses the state-of-the-science on EDCs and argues for the status quo in the regulation of these hazardous substances.

EDCs are commonly found in food and [food containers](#), plastic products, furniture, toys, carpeting, building materials, and cosmetics. They are often released from the products that contain them and enter the bodies of humans and wildlife through dust or through the [food chain](#). A large volume of studies have shown that EDCs exert their effects by interfering with endogenous hormone action and can impact male and female reproduction, [breast development](#) and cancer, [prostate cancer](#), neuroendocrinology, thyroid, metabolism and obesity, and cardiovascular endocrinology.

"The Dietrich et al. paper neglects the fundamental principles of how the [endocrine system](#) works and how chemicals can interfere with its normal function, nor does it consider the consequences of that interference," said Andrea Gore, PhD, lead author of the editorial and Editor-in-Chief of *Endocrinology*. "We cannot have sound policies for regulating these chemicals when we ignore the science."

The *Endocrinology* editorial, Gore et al., represents an unprecedented

response from the endocrine community. The editorial was signed by 20 editors-in-chief and 28 associate and senior editors of endocrine, neuroendocrine, environmental, and other peer-reviewed journals. Dr. Teresa Woodruff, PhD, President of The Endocrine Society and several other presidents of societies or medical organizations have also signed on to the editorial.

The Endocrine Society has published a Scientific Statement on EDCs—a thorough review of the literature, with recommendations for improved policy—and a Statement of Principles—a summary of critical endocrine principles that are relevant to risk assessment as it applies to EDCs. In its Statement of Principles, the Society recommends that endocrine principles be incorporated into programs by the EPA and other agencies charged with evaluating chemicals for endocrine-disrupting potential.

"Regulatory decisions on the use of EDCs should be made based on the best available science and expertise that involves among others, reproductive biology, endocrinology, medicine, genetics and toxicology," said Gore.

The editorial, "Policy Decisions on Endocrine Disruptors Should Be Based on Science Across Disciplines: A Response to Dietrich et al.," was published online, ahead of print.

Provided by The Endocrine Society

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