

Endocrine Disrupting Potential of Persistent Pesticides and Risk of Estrogen-mediated Human Cancer and other Related Disorders †

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† Presented at Environmental Toxicology: Impact on Human Health (Environ Tox 2021)

Received: 5.11.2021; Revised: 18.11.2021; Accepted: 20.11.2021; Published: 30.11.2021

Abstract: An endocrine-disrupting compound is an exogenous substance that possibly interferes with synthesis, secretion, transport, metabolism, binding action, or elimination of natural blood-borne hormones that play a role in reproduction, homeostasis, and developmental process. For the last five decades, concern has been growing regarding adverse health effects on humans and wildlife, which may be associated with the disruption of hormonal systems by pesticides. These pesticides possess hormonal including estrogenic properties that may disturb/disrupt normal body functions and cause various human disorders associated with hormones, including estrogen-mediated cancers. These compounds exert their effect through nuclear hormone receptors, mainly estrogen receptors (ERs). Pesticides are one of the most widely used environmental chemicals worldwide that are an evil necessity to feed the rapidly increasing population of the world. Some of the most well-known pesticides possess hormonal, including estrogenic property that may disturb/disrupt normal body functions and cause various human disorders associated with hormones, includingestrogen-mediated cancer and many other disorders.

Keywords: Pesticides; cancer; carcinogen; endocrine

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Funding

This review received no external funding.

Acknowledgments

This review has no acknowledgment.

Conflicts of Interest

The authors declare no conflict of interest.