

What are Endocrine System Disruptors?



Scan here for resources

The M-LEEd Center's Community Engagement Core (CEC) increases awareness and understanding of environmental health research.

Stakeholder Advocacy Board members include:

- Community Health and Social Services
- The Detroit Health Department
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Eastside Community Network
- Ecology Center
- Green Door Initiative
- MDHHS
- Sierra Club
- We the People of Detroit

Contact us:

Alison Walding
Project Manager
Community Engagement Core
walison@umich.edu

What is the endocrine system?

The endocrine system is the network of glands in our bodies. These glands produce hormones which are released into the blood and carried to tissues and organs all over the body to control body functions.¹ Below is a visual of the glands and organs involved in the endocrine system.

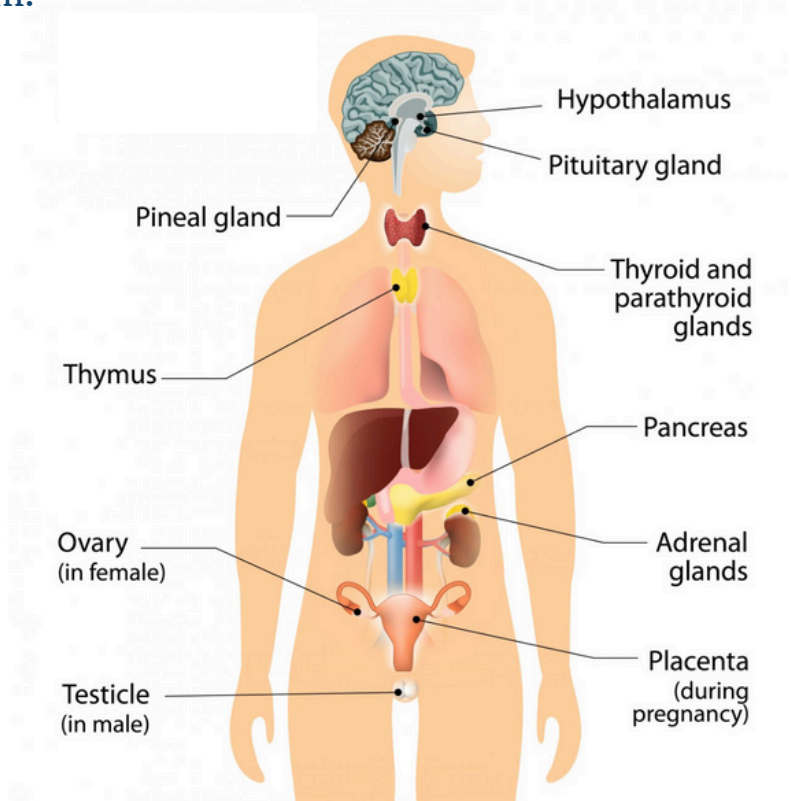


Image of the Endocrine system from the Environmental Protection Agency ¹

The glands communicate with each other to control growth and development, metabolism, brain function, reproduction, and behavior.

What are endocrine disruptors?

Endocrine disruptors are chemicals that prevent the endocrine system from working properly.^{2 3} Several man-made chemicals can harm the body in many ways by interfering with the endocrine system, which plays an important role in maintaining the body's normal function.^{2 3}



Cosmetics



Metal-lined cans



Food pesticides



Nonstick pans



Fast food packaging



Plastic bottles



Toys

Endocrine disruptors are found in many of the products that we use every day. We may be exposed to endocrine disruptors through:

- Breathing them in drinking
- Contaminated water
- Eating contaminated food
- Coming into contact with contaminated products through the clothes we wear or the cosmetics and soaps we use.⁴

Recent research on endocrine disruptors shows their possible connection with diseases such as endometriosis,⁵ breast cancer⁶, obesity⁷, diabetes⁸, and reproductive disorders such as uterine fibroids, menstrual irregularity, and polycystic ovary syndrome in women^{9 10}, and testicular cancer and lower sperm quality in men¹¹. Exposure to endocrine disruptors are also linked to poor pregnancy outcomes such as miscarriage, low birth weight and preterm birth¹².

What does this mean for me and my community?

Further research on these chemicals will help improve our ability to understand which chemicals and products are harmful to whom, and how to best regulate them.

Even as we continue to build that understanding, here are some steps we can take to protect ourselves and our communities:

- Use an app, such as Think Dirty, to evaluate the ingredients in cleaning, beauty, and household products before you buy them.
- Support continued regulation and environmental cleanup of known endocrine disruptors.
- Support continued research on products containing chemicals to properly understand their effect on the human body.
- Stay informed on new research. Scan the QR code to find resources.

Please see http://mlead.umich.edu/Coec_Fact_Sheets.php for the citations included in this factsheet.

This research was supported by the National Institute of Environmental Health Sciences (NIEHS) (#R01ES022616, #R01ES032389) and the Fred A. and Barbara M. Erb Family Foundation, with additional support provided by the Michigan Center on Lifestage Environmental Exposures and Disease (M-LEEaD) (NIEHS #P30ES017885).