Are Animal Studies Necessary?

Yes.

A widely shared societal goal is to reduce and ultimately eliminate animal testing. Specialists in endocrine disrupting science share this goal.

But current methods to test endocrine disrupting chemicals (EDCs) for safety using computer modeling, artificial intelligence, and test tube experiments are not yet up to the task.





Why do we still need animal studies for EDCs?

- The endocrine system involves multiple interacting glands and tissues, and is too complex for today's non-animal tests to emulate.
- Animal studies often reveal newly discovered and unexpected effects of EDCs.
- There are very few non-animal based tests that can reveal if a chemical can harm the brain.
- Detecting transgenerational effects—effects passed down from one generation to the next—is not possible with today's non-animal testing procedures.



Animal studies protect public health.

Using non-animal methods incapable of detecting EDC effects means that widespread human and wildlife exposure will occur. These exposures will affect far more numbers of animals than would have been used in animal experiments.

How can we reduce animal experiments today?

- Create policies that allow regulatory agencies to use non-animal tests. Today's regulations do not allow that.
- Test chemicals with all the best non-animal approaches first. If these show that a chemical is an EDC, skip animal testing and just ban the chemical. But if these approaches don't identify it as an EDC, we still need animal tests because of what non-animal testing can't yet find.
- Use fewer animals: Follow US NIH policies on sample size.

Understanding what EDCs are and their effects will help guide smart policy.