

# Let's make this simple: Estrogenic effects come from estrogens. (Duh). NOT from plastics.

By ACSH Staff — August 6, 2014



Of all the garbage science topics that we routinely cover,

among the worst is the concept that miniscule amounts of so-called endocrine disruptor chemicals that supposedly have an adverse impact on human sexual development do anything whatsoever. The plastic component BPA and plastic softeners, phthalates, are the two poster children of the movement, but there are many more.

It is thus especially satisfying to read that in *properly* conducted studies of pregnant rats, an actual sex hormone does cause changes in sexual and central nervous system development (perfectly reasonable), while BPA does not (perhaps even more reasonable).

Lead author Sherry A. Ferguson, Ph.D. of the National Center for Toxicological Research (a branch of the FDA) reported on a study where pregnant Sprague-Dawley rats a very common breed used in research who either were or were not given BPA and/or an estrogen. Following this experiment a very thorough analysis of the two groups was conducted.

The results should not be the least bit surprising to anyone who has followed the real science ignored or distorted by those behind the phony science of endocrine disruption over the years: The rats treated with EE2 were affected in a number of ways. The rats given BPA were not. It doesn't get more clear than this.

In particular, the [paper](#) [1], which just appeared in the journal *Toxicological Sciences* makes about as strong a case as you'll ever see.

The group of pregnant rats was divided into two groups (12 rats per group), and given either ethinyl estradiol (EE2) a very potent estrogen, or BPA. Both chemicals were given at doses of both chemicals that were far (about 1,000-fold) below the dose at which any health effects would be expected.

The results are about as clear as it gets. The group of EE2-fed rats were fed both BPA and EE2 between days 6 and 21 of their gestational period. (The normal gestational period for rats is 22

days.)

Then, for extra evidence, following birth, (postnatal period 1-21 days), the *offspring* were fed the same amounts of both chemicals. The results are entirely predictable to anyone who had the slightest idea of the fallacy of endocrine disruption.

According to the paper, Body weight, pubertal age, estrous cyclicity, and adult serum hormone levels were measured. Adolescent play, running wheel activity, flavored solution intake, female sex behavior, and manually elicited lordosis (curvature of the spine) were assessed.

And guess what? BPA did NOTHING. To either the pregnant mothers or their offspring. Nada. Zilch. Diddly squat. No change in sexual development or behavior was noted in the BPA group,

ACSH s Dr. Josh Bloom says, Perhaps I m dwelling in some delusional state something that friends routinely point out but perhaps we can now move on to another topic that actually means something. Sure, the professional BPA bashers may have to find another way to make monthly payments on their Audis, but I can live with this.

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**Links**

[1] <http://www.ncbi.nlm.nih.gov/pubmed/24798382>