

BPA lowers male fertility: report

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Daily exposure to a chemical that is prevalent in the human environment, bisphenol A (BPA), causes lowered fertility in male mice, according to the results of a new study that will be presented Saturday at The Endocrine Society's 93rd Annual Meeting in Boston.

Mice that received daily BPA injections for two months had lower sperm counts and <u>testosterone levels</u> than those of mice that received saline injections without BPA, investigators from Banaras Hindu University in Varanasi, India, found. Compared with untreated controls, mice exposed to BPA produced litters that were 50 percent smaller.

"We are being exposed to BPA in our daily lives at a level much higher than the safe recommended exposure," said the study's principal author, Surya Singh, PhD, associate professor in the university's biochemistry department. "In this study, we are trying to explore what the outcome can be if we are continuously exposed to BPA in our routine life."

BPA-exposed mice received a dose that was twice the daily upper limit of safe exposure recommended by the U.S. <u>Food and Drug</u> <u>Administration</u> and the <u>Environmental Protection Agency</u>.

At a BPA dosage of 100 micrograms per kilogram of body weight daily, the mice also had structural defects in their testicles and were considered subfertile. If the same dose had been given longer than two months, Singh speculated that it might lead to infertility.

However, he said they saw lowered fertility in the mice as early as one



month of BPA exposure.

"Even short-term exposure to BPA could be dangerous to fertility, but we are still investigating this possibility," Singh said.

These new research findings add to a growing body of scientific evidence that links exposure to BPA, an endocrine (hormone) disrupter, with numerous <u>adverse health effects</u>, including on reproductive function.

Human exposure to <u>BPA</u> comes from sources such as epoxy resin-lined food cans and hard polycarbonate plastics, which leach the chemical, especially when heated to high temperatures.

Provided by The Endocrine Society

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