

Newborn weights affected by environmental contaminants

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Recent epidemiological studies have revealed an increase in the frequency of genital malformations in male newborns (e.g., undescended testes) and a decrease in male fertility.

The role played by the growing presence in our environment of contaminants that reduce male hormone action could explain this phenomenon.

It is known that the birth weight of males is higher than that of females due to the action of male hormones on the male fetus. If the exposure of pregnant women to environmental contaminants that diminish the action of male hormones has increased over the years, one would expect to see a decrease in the sex difference in birth weight.

This is exactly what a new study published in the July 2009 issue of *Epidemiology* shows. Investigators analyzed the Public Health Agency of Canada's database on the birth weights of more than five million children born in Canada between 1981 and 2003.

Using statistical methods that control for changes over time of mother's age and parity, the investigators effectively show a sustained decrease in [birth weight](#) differences between boys and girls, which supports the hypothesis of growing endocrine disruption related to environmental contaminants. Contaminants found in plastic materials represent plausible candidates, since they are known to diminish the action of male hormones.

"Our study underlines the importance of probing the impact of environmental contaminants on the health of mothers and fetuses and on the reproductive potential of future generations," says lead researcher Dr. Guy Van Vliet, a pediatric endocrinologist and investigator at the Sainte-Justine University Hospital Research Center and a professor at the Department of Pediatrics of the Université de Montréal.

Source: University of Montreal ([news](#) : [web](#))

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