

Exposure to phthalates may be a risk factor for low birth weight in infants

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Many parents worry about their child's exposure to phthalates, the chemical compounds used as plasticizers in a wide variety of personal care products, children's toys, and medical devices. Phthalate exposure can begin in the womb and has been associated with negative changes in endocrine function.

A new study soon to be published in the [Journal of Pediatrics](#) examines the possibility that in utero phthalate exposure contributes to low birth weight in infants. Low birth weight is the leading cause of death in children under 5 years of age and increases the risk of cardiovascular and metabolic disease in adulthood.

To investigate the associations between in utero phthalate exposure and low birth weight, Dr. Renshan Ge of the Population Council and colleagues from Fudan University and Second Military Medical University in Shanghai studied 201 pairs of newborns and their mothers between 2005 and 2006. Of the 201 infants studied, 88 were born with low birth weight. The researchers analyzed samples of the infants' meconium, the first bowel movement that occurs after birth, and cord blood to determine phthalate levels.

They found quantifiable levels of phthalate and phthalate metabolites in more than 70% of the samples. Infants with low birth weight had consistently higher levels of phthalates. According to Dr. Ge, "The results showed that phthalate exposure was ubiquitous in these newborns, and that prenatal phthalate exposure might be an environmental risk

factor for low birth weight in infants." Although these associations are not conclusive, this study supports the accelerating efforts to minimize phthalate exposure.

More information: The study, reported in "Phthalate Levels and [Low Birth Weight](#): A Nested Case-Control Study of Chinese [Newborns](#)" by Zhang Y, PhD, Lin L, MD, Cao Y, PhD, Chen B, MD, Zheng L, MSC, Ge R, MD, appears in the *Journal of Pediatrics*, DOI 10.1016/j.jpeds.2009.04.007, published by Elsevier.

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