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Plastics component affects intestine: study

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The chemical Bisphenol A used in plastic containers and drinks cans has been shown for the first time to affect the functioning of the intestines, according to a French study published Monday.

National Institute of Agronomic Research researchers in Toulouse found the digestive tract of rats react negatively to even low doses of the chemical also called BPA, the *Proceedings of the National Academy Sciences* journal reported.

Their research, also conducted on human intestine cells, found that the chemical lowered the permeability of the intestines and the immune system's response to digestive inflammation, it said.

BPA is used in the production of polycarbonated plastics and epoxy resins found in baby bottles, plastic containers, the lining of cans used for food and beverages, and in dental sealants.

Over 130 studies over the past decade have linked even low levels of BPA, which can leach from plastics, to serious health problems, breast cancer, obesity and the early onset of puberty, among other disorders.

The French study focuses on the first organ to come in contact with the substance, the intestine.

The researchers orally administered doses of BPA to the rats that were equivalent to about 10 times less than the daily amount considered safe for humans, a statement from the Toulouse institute said.

They saw that BPA reduced the permeability of the instentinal lining through which water and essential minerals enter the body, it said.

They also found that newborn rats exposed to BPA in the uterus and during feeding have a higher risk of developing severe intestinal inflammation in adulthood.

The study "shows the very high sensitivity on the intestine of Bisphenol A and opens news avenues for research" including to define new acceptable thresholds of the substance for humans, the institute said.

In May this year, the six major baby bottle makers in the United States agreed to stop using the chemical.

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