

Exposure to Pesticides in the Womb may harm a Baby's Brain

Exposure to pesticides in the womb may harm a baby's brain and hinder the child's intelligence.

Studies found a link between prenatal pesticide exposure and lower IQ scores. One study found children with the highest levels of exposure in the womb scored 7 points lower on an IQ test than those who had the lowest levels of exposure.

Professor of Epidemiology, Maternal and Child Health at the University of California, Brenda Eskenazi says, that an IQ drop is equivalent to a 7-year-old performing as if they were 6 1/2 years old.

Did you know that pesticides and other chemicals known as i.e. organophosphates are also present in the breathing air on aircraft?

These chemicals are known to be toxic to nerve cells. They may affect the way brain cells communicate. The developing brains of children are more susceptible to pesticides' toxic effects.

Professor Eskenazi and her colleagues collected urine samples from women who were pregnant, and tested them for a breakdown product of organophosphates. Samples were also collected and tested from children when they were 6 months old until age 5.

The levels of pesticides in the urine of the pregnant mothers in Eskenazi's study were somewhat higher than those seen in the average (U.S.) population, but according to Eskenazi they are realistic.

Every increase by x10 in the concentration of organophosphates detected during a mother's pregnancy corresponded to a 5.5 point drop in overall IQ scores.

The results held even after the research team took into account other life and environmental factors that could influence the child's IQ score.

There was no link between exposure to pesticides after birth and the child's IQ score. This may mean a baby's exposure to chemicals while in the womb has a greater impact on brain development than exposure during childhood.

A New York study at Mount Sinai Medical Center found that organophosphates had a particularly strong effect on children's reasoning skills.

Another New York study at Columbia University found a link between pesticide levels in umbilical blood and a decrease in the child's IQ and memory scores. (sources)

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