Iron supplements reduce ADHD in low birth weight infants

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In a study published today in *Pediatrics*, scientists at Umeå University in Sweden conclude that giving iron supplements to low birth weight infants reduces the risk of behavior problems like ADHD later in life.

The study, Effects of Iron Supplementation on LBW Infants on Cognition and Behavior at 3 Years, is published in the January 2013 issue, released online Dec. 10, 2012.

In the randomized controlled trial, researchers in Sweden gave 285 marginally low birth weight infants either 0, 1 or 2 mg/kg and day of iron supplements from 6 weeks to 6 months of age. At age three-and-a-half, these infants and 95 who had a normal birth weight were assessed for intelligence and behavior. There were no significant differences in IQ between the low birth weight groups and the normal-weight control group. However, for behavioral problems like ADHD, there was a significant effect from the iron supplements. Of the low birth weight infants who received no iron supplements, 12.7 percent showed signs of behavior problems, compared to 2.9 percent of infants in the 1-mg group and 2.7 percent of the 2-mg group. In the control group, 3.2 percent of children showed signs of behavioral problems.

Study authors conclude the results demonstrate long-term health benefits of early iron supplementation of otherwise healthy, marginally low birth weight infants.

The study was done in collaboration with colleagues at the Karolinska Institute, Stockholm, by researchers at the Department of Clinical Sciences, Umeå University.

More information: SK Berglund, B Westrup, B Hägglöf, O Hernell, M Domellöf; Effects of Iron Supplementation of LBW Infants on Cognition and Behavior at 3 Years, *Pediatrics*. Jan. 2013,

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