

Low Iron Linked to Behavior Problems in Kids

Source: Food Product Design

Supplementing iron into the diets of low birth weight infants significantly reduced the prevalence of behavioral and emotional problems as toddlers compared to those infants who did not take iron, according to a new study published in the journal *Pediatrics*. The findings suggest a causal relation between infant iron deficiency and later behavioral problems.

Researchers at Umeå University noted low birth weight infants are at increased risk of cognitive and behavioral problems and at risk for iron deficiency, which is associated with impaired neurodevelopment. Therefore, they conducted a randomized controlled trial in 285 marginally low birth weight infants (2,000 to 2,500 g) infants received who received 0, 1, or 2 mg/kg/day of iron supplements from six weeks to six months of age. At 3.5 years of age, these infants and 95 normal birth weight controls were assessed with a psychometric test (Wechsler Preschool and Primary Scale of Intelligence) and a questionnaire of behavioral problems (Child Behavior Checklist; CBCL). CBCL measures maladaptive behavioral and emotional problems in children, such as internalizing (i.e., anxious, depressive and overcontrolled) and externalizing (i.e., aggressive, hyperactive, noncompliant and undercontrolled) behaviors.

Children who received the supplement had better CBCL scores, indicating fewer behavioral problems. Almost 13% of the children who received no iron had scored a above the U.S. subclinical compared to 2.9% and 2.7% in 1-mg and 2-mg groups, respectively. The researchers found no significant differences in IQ between the groups.

Iron levels are low in the United States, according to a report from the Centers for Disease Control and Prevention (CDC). The nutrient also has been shown to reduce fatigue in women and increase fitness in teenagers. A recent study also showed babies born to obese mothers have lower iron levels at birth, which can result in greater risk for delays in motor and cognitive development.