

## **C-section babies have abnormal immune function**

Sunday, March 17, 2013 by: David Gutierrez, staff writer

(NaturalNews) Children delivered by C-section are significantly more likely to have abnormally reactive immune systems that make them prone to asthma and allergies, according to a study conducted by researchers at Henry Ford Hospital and presented at the annual meeting of the *American Academy of Allergy, Asthma and Immunology*.

The researchers tested 1,258 children delivered between 2003 and 2007 for levels of Immunoglobulin E (IgE), an immune protein linked to asthma and allergies. The children's umbilical cords were tested at birth and their stool was tested at one month, six months, one year and two years. The researchers also tested samples of their parents' blood and mothers' breast milk. They collected information about family histories of asthma or allergies, the presence of pets or tobacco smoke in the home, histories of illness or medication use, and any unusual factors during pregnancy.

The researchers found that by age two, children delivered by C-section were five times more likely to have elevated levels of IgE in response to common allergens (such as dust or pet dander) than children delivered vaginally. This indicates that the children had already become "sensitized," a necessary first step toward developing full-blown asthma or allergies.

The study was funded by the *National Institute of Allergy and Infectious Diseases* and by Henry Ford Hospital.

### **Sterile environments make you sick**

"This further advances the hygiene hypothesis that early childhood exposure to microorganisms affects the immune system's development and onset of allergies," lead author Christine Cole Johnson said. "We believe a baby's exposure to bacteria in the birth canal is a major influencer on their immune system."

Johnson noted that research has shown that children delivered by C-section have a different composition of microorganisms in their gastrointestinal tracts than children delivered vaginally. These microorganisms appear to place them at higher risk for producing IgE and therefore developing allergies.

"The gut is ... our biggest immune organ, so anything that affects the ecology of the gut is likely to have a strong impact on our bodies," Johnson said.

Other advocates of the hygiene hypothesis have suggested that rising allergy and asthma rates are due in part to an increasingly sterile childhood environment, where children are shielded from playing in the dirt and made to continually wash their hands with antibacterial soap or hand sanitizer.

"Personally, based on the current weight of evidence, I would avoid the approach that some moms take of trying to keep an 'antiseptic house,'" Johnson said.

The study is not the first to raise concerns over the health effects of C-sections.

"Babies born via C-sections have an increased chance of having to be administered into the NICU [neonatal intensive care unit] and suffer from breathing problems," said Maureen Corry, Executive Director of Childbirth Connection. "Mothers are more likely to have a major infection, they are at higher risk for embolisms, for bleeding, and for long term consequences ... some of which can be life threatening."

The United States has increasingly come under fire for its high C-section rate, which critics allege is driven by profit motives rather than health concerns.