# Maternal Vitamin D Affects Children's Asthma Risk

BY PATRICE WENDLING
*Chicago Bureau*

MIAMI BEACH — High maternal vitamin D intake in pregnancy may help protect children from asthma and wheezing illnesses during early childhood, results of a large, prospective study suggest.

In multivariate analyses, every 100-IU increase in maternal vitamin D intake was associated with about a 10% lower risk for any wheeze (odds ratio 0.90) and with nearly a 20% lower risk of having a child at high risk for asthma (OR 0.82). This inverse association was present whether vitamin D came from diet or nutritional supplements and remained after controlling for 10 confounding factors, Dr. Carlos A. Camargo Jr. reported at the annual meeting of the American Academy of Allergy, Asthma and Immunology.

"This is a new hypothesis, but the vitamin D story is going to be one that you're going to hear more and more about in the years ahead," he told reporters at the meeting. "Already this year there is a lot of discussion going on about vitamin D and cancer. But to link this to asthma and allergic diseases is very exciting."

The best explanation for the observed protective effect is that vitamin D, which is known to have some immunologic effects, influences IL-10 secretion by regulatory T cells, said Dr. Camargo of the department of epidemiology at Harvard Medical School in Boston.

The findings suggest that vitamin D insufficiency is a reality, particularly in northern parts of the country. Exactly what the correct amount of daily vitamin D intake is remains unclear, in part because of emerging data from this and studies in other specialties, he said. "Most people in the field would recommend 800-1,000 IU/day, and yet you'll see recommendations of 200-400 IU in the literature," he said.

The mean vitamin D intake during pregnancy was 548 IU/day in the study, which included 1,194 mother-child pairs in Project Viva, a prospective prepartum cohort study in Massachusetts. Intake was assessed using a validated food questionnaire in the first and second trimesters and was averaged for analyses.

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**DR. CAMARGO**

Dr. Camargo and his colleagues defined any wheeze as a mother-reported wheeze or physician-diagnosed asthma, wheezing, or reactive airway disease at ages 1, 2, or 3 years. High risk of asthma was defined as the subset of children with two or more reports of wheezing at 1, 2, or 3 years, plus either parental history of asthma or child diagnosis of eczema. ■



# Oxytocin May Prevent Placental Retention

MIAMI BEACH — Intraumbilical vein injection with oxytocin following cord clamp was effective for preventing placental retention and reducing postpartum blood loss in a randomized, placebo-controlled, double-blind study presented at the annual meeting of the Society for Maternal-Fetal Medicine.

The study is the first to suggest that oxytocin might be beneficial in preventing complications in the third stage of labor, though not its duration, said Dr. Labib M. Ghulmiyyah of the University of Cincinnatti.

A total of 79 women with uncomplicated singleton pregnancies were randomized to 30 mL of saline or 20 IU of oxytocin in 30 mL of saline. The mean time to placental delivery did not differ significantly between the two groups, but significantly more women in the saline group than in the oxytocin group had a retained placenta after 15 minutes (5 vs. 0 women).

The groups had similar mean hemoglobin levels prior to delivery, but those who received saline had significantly lower mean postpartum hemoglobin levels (used as a measure of blood loss) than did those in the oxytocin group.

**—Sharon Worcester**

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