

Vitamin D during pregnancy may boost a baby's brain health, according to a new Spanish study.

Adequate Vitamin D during Pregnancy Improves a Baby's Score on Developmental Tests

A recent study published in the journal *Pediatrics*, has found that when pregnant women obtain adequate vitamin D during pregnancy, their babies score higher on developmental tests when compared to those with a known vitamin D deficiency.

The researchers from the Centre for Research in Environmental Epidemiology in Barcelona studied 1,820 mothers and their babies and found that babies of moms who had healthy levels of vitamin D during pregnancy scored slightly higher on standardized tests that measured mental development and psychomotor skills than babies of moms who were vitamin D deficient.

This large scale population-based cohort study recruited women during their first trimester of pregnancy. Maternal plasma vitamin D levels were measured mainly during the second trimester (from 12-23 weeks). Using the Bayley Scales of Infant Development, mental and psychomotor scores of the babies were assessed by trained psychologists at age 14 months. Results showed a positive linear relationship between maternal vitamin D levels and developmental test scores in the babies. In comparison with babies from mothers whose vitamin D levels were less than 20 ng/ml, babies of mothers with vitamin D levels above 30 ng/ml showed higher mental and psychomotor test scores.

Vitamin D deficiency is a global problem with serious health consequences. This research has shown that a higher circulating concentration of vitamin D during pregnancy is associated with improved mental and psychomotor development in babies. Additional studies are warranted to further assess the long-term consequences of maternal vitamin D deficiency.

Eva Morales et al. Circulating 25-Hydroxyvitamin D3 in Pregnancy and Infant Neuropsychological Development. *Pediatrics* 2012;130:e913-e920.