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Vitamin D deficiency early in life is associated with rickets, a disorder characterized by soft bones. New research has shown that despite taking a prenatal vitamin, vitamin D deficiency is very common in pregnant women and newborn infants. Higher-dose supplementation and increased sun exposure is needed to improve maternal and infant vitamin D status.

VITAMIN D DEFICIENCIES WIDESPREAD AMONG PREGNANT WOMEN & INFANTS DESPITE PRENATAL VITAMIN USAGE

Even among those taking prenatal multivitamin supplements, vitamin D levels were found to be insufficient or deficient in pregnant women, particularly in women living in northern regions, according to research published in the *Journal of Nutrition*. Researchers took blood samples from 400 pregnant women—200 African American women and 200 Caucasian women—before 22 weeks gestation and again after delivery.

More than 80% of African American women and nearly half of Caucasian women tested at delivery had levels of vitamin D that were insufficient, even though more than 90% of them used prenatal vitamins during pregnancy.

In addition, umbilical cord blood from newborns showed 92.4% of African American babies and 66.1% of Caucasian infants had insufficient vitamin D levels at birth, leaving them at risk for rickets and other health problems. A newborn relies completely on its mother for its vitamin D stores.

These results suggest that African American and Caucasian pregnant women and newborns residing in the northern U.S. are at high risk of vitamin D insufficiency, even when mothers regularly take prenatal vitamins. Higher-dose supplementation is needed to improve maternal and infant vitamin D status.

< *J. Nutr.* 137:447-452, February 2007. >