DEFICIENT LEVELS OF VITAMIN D DURING PREGNANCY MAY ADVERSELY AFFECT BIRTH OUTCOMES AND NEWBORN HEALTH

BY

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MASTER'S PROJECT

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Abstract

Objective: Vitamin D is an essential nutrient during pregnancy due to rapid growth of bone development in the fetus. It is hypothesized that low levels of maternal serum 25(OH)D lead to a disruption of neonatal calcium absorption and affect intrauterine growth, premature labor, maternal blood pressure, newborn birth weight; and possibly potentiate an increased risk of cesarean delivery, and an increased risk of newborn complications. Current levels of vitamin D are inadequate in most areas of the United States with certain populations experiencing a further risk of deficit. *Data Sources:* CINAHL, PubMED, Medline, Proquest, Google Scholar, and UpToDate were used for reviewing the literature. *Study Selection:* In this review, past and current studies were reviewed to support or refute the explored hypothesis. *Data Extraction:* No official data extraction tools were implemented in this review. *Data Synthesis:* To date there is an inadequacy of large randomized studies to support vitamin D as a factor in adverse birth outcomes; however, there is enough evidence to support supplementation during pregnancy and in the newborn period for the prevention of osteomalacia and rickets. *Conclusions:* As more research is done involving pregnant women, recommended 25(OH)D levels and the amount of vitamin D supplementation will become clear for patients and practitioners.

Key Search Words/Terms:

Key search words were: vitamin D, birth outcomes, preeclampsia, pregnancy, rickets, cesarean section, ultraviolet radiation, UVB, sunlight and calciferol.