

## ORIGINAL RESEARCH

### Optimal Nutrition during Pregnancy: Food Intake Versus Supplementation

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#### Abstract

During the COVID-19 pandemic, dietary habits shifted towards homemade and organic foods due to restrictions on dining out. This case study explores the impact of adequate food intake, focusing on organic sources, versus supplementation on the health of a pregnant woman and her baby. A 37-year-old pregnant woman, in her 11th week, was diagnosed with calcium lithiasis and hydronephropathy, exacerbated by a family history of calcium oxalate stones. After a 20-day treatment regimen with antibiotics, painkillers, and alpha blockers, she was advised against inorganic calcium and vitamin D supplementation to protect her kidneys. Despite concerns from previous pregnancies in 2017 and 2018 where she relied on supplements, she adopted a rigorous dietary strategy. This included three servings of yogurt and two servings of full-cream milk or cheese daily for the developing fetus's bone health. She added broccoli as a natural calcium source and consumed detoxifying juices from carrots, cucumber, and apples, along with honey and ghee, at dinner. Additionally, she maintained an active lifestyle with sufficient sun exposure. Throughout her pregnancy, she remained physically active, caring for her two daughters. After nine months, she delivered a healthy baby boy without supplement pills, highlighting her vigilance regarding her baby's well-being. Notably, the infant exhibited normal-sized anterior fontanels within the range of 0.6 cm to 3.6 cm, indicative of optimal vitamin D and A levels. This was in contrast to his siblings, who had larger fontanels (up to 3.1 cm) and delayed closure, likely due to reliance on supplementation. This case highlights the efficacy of adequate food intake, coupled with exercise, sun exposure, and rest, in promoting positive pregnancy outcomes. It underscores the importance of a balanced diet rich in organic nutrients, suggesting that supplementation may not always be necessary when dietary needs are met through natural sources.

**Keywords:** Pregnancy Nutrition, Organic Foods, Supplementation, Calcium Lithiasis, Fetal Health