

# Extra calcium during pregnancy has no benefits, except to prevent hypertension

October 7 2011, By Christe Bruderlin-Nelson

---



Most physicians instruct pregnant women to increase their calcium intake, but a new evidence review of potential benefits of calcium supplementation for mom and baby found none, except for the prevention of pregnancy-related hypertension.

Experts agree that during [pregnancy](#), a mother's diet and nutritional status contribute significantly to the health and wellbeing of her offspring. Yet, the effects of supplementation with [calcium](#), or the amounts to supplement, have remained unclear.

A review led by researcher Pranom Buppasiri, MD, of the department of obstetrics and gynecology at Khon Kaen University in Thailand, shows that calcium supplementation has no effect on preventing preterm birth

or low infant birth weight and no effect on bone density in [pregnant women](#). Bupparsiri notes, however, that previous reviews have shown that calcium supplementation does help in the [prevention](#) of preeclampsia.

Preeclampsia is a dangerous condition marked by [hypertension](#) and protein in the urine that can develop into serious complications for the mother and baby. The definitive treatment for pre-eclampsia is delivery of the baby, often resulting in preterm and/or low birth weight babies.

More than 16,000 women participated in the 21 studies included in the review. The review did find a small difference in average infant birth weight, but the authors were unable to ascertain the clinical significance in the diverse population examined.

Buppasiri and colleagues' review appears in the latest issue of *The Cochrane Library*, a publication of the Cochrane Collaboration, an international organization that evaluates medical research. Systematic reviews draw evidence-based conclusions about medical practice after considering both the content and quality of existing medical trials on a topic.

Stephen Contag, MD, a perinatologist at Sinai Hospital of Baltimore's Institute of Maternal Fetal Medicine called the review confusing and said, "There is an inherent confounding effect between the two interventions in that whenever maternal hypertensive disease is prevented, preterm labor is less likely to occur." In other words, calcium supplementation might prevent preterm labor indirectly by preventing high blood pressure. He added that, "the definitive treatment for pregnancy related hypertensive disease is delivery, which often occurs preterm depending on the severity and timing of onset."

Contag stated that according to current Institute of Medicine

recommendations, “[calcium supplementation](#) is recommended in addition to dietary [calcium intake](#), in order to achieve recommended daily allowance of 1,000 mg/day.”

However, John McDougall, MD, an internist, nutrition expert and medical director of the McDougall Program in Santa Rosa, California, cited a July 2010 study in the *British Medical Journal* to support the fact that he does not prescribe calcium supplements, because they increase the risk of heart attacks and strokes.

“Certainly, taking isolated concentrated minerals, such as calcium, creates physiological imbalances in the body,” McDougall said in a commentary regarding the July study. “Immediately after consuming calcium supplements, the calcium in the blood increases. Thereafter, the body must adjust to this large burden of minerals. One of the adverse effects appears to be artery damage.”

Buppasiri said there were still not enough studies to draw a meaningful conclusion about supplementation. “We need more high quality studies to address this review question, especially in low calcium intake populations,” he said.

**More information:** Buppasiri P, et al. Calcium Supplementation (other than for preventing or treating hypertension) for improving pregnancy and infant outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 10.

Provided by Health Behavior News Service

Citation: Extra calcium during pregnancy has no benefits, except to prevent hypertension (2011, October 7) retrieved 16 July 2024 from <https://medicalxpress.com/news/2011-10-extra-calcium->

[pregnancy-benefits-hypertension.html](http://pregnancy-benefits-hypertension.html)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.