

Vitamin D supplementation in pregnant or infants for preventing allergic diseases: a systematic review of RCTs

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Abstract

Abstract Background: It is still unclear if and to what extent antenatal or early postnatal vitamin D supplementation would affect the development of allergic diseases later in life. **Objective:** This study aimed to quantify the effect of antenatal or early postnatal vitamin D supplementation on allergic diseases in life. **Methods:** MEDLINE(PubMed), EMBASE(OVID), and The Cochrane Central Register of Controlled Trials, and Google Scholar were searched up to March 01 2020. We included only randomized controlled trials. Two reviewers independently extracted data and assessed the certainty in the body of evidence. **Results:** The search yielded 1251 studies. Eight RCTs were included in the systematic review, which suggests that Vitamin D supplementation for pregnant women and infants may not decrease the risk of developing allergic diseases such as asthma and/or wheezing, eczema, allergic rhinitis, lower respiratory tract infection or food allergies. **Conclusions:** Limited information is available addressing primary prevention of allergic diseases after Vitamin D supplementation and its potential impact remains uncertain. **Keywords:** Allergy, Prevention, Systematic review, Vitamin D

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