Abstract

Title: Does supplementation of omega-3 during pregnancy affect prevalence of allergy in infants and children?

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Background

Epidemiologic research has shown an association between a high intake of fish and allergy. The underlying theory is that allergy develops already at a prenatal stage and food intake during pregnancy has been shown to be significant. Conducting research on allergy is problematic since it has genetic, as well as environmental, determinants.

Objective

This thesis attempts to conclude and evaluate research on a connection between supplementation of omega-3 during pregnancy and allergic outcomes in infants and children.

Search strategy

The literature search was conducted in the databases PubMed and Scopus. Among the keywords chosen were omega 3, supplement, pregnancy and allergy.

Selection criteria

Human RCT, that measured allergy, where the intervention consisted of supplementation with omega-3 for at least ten weeks during pregnancy and ceased at birth.

Data collection and analysis

Three articles were chosen for this thesis. The articles were examined using templates from SBU and the quality of evidence was evaluated according to GRADE.

Main results

None of the articles showed a protective effect on allergic outcome but in one of the studies there was significant reduction in eggallergy and another showed significant lower occurrence of severe eczema.

Conclusions

Supplementation with omega-3 during pregnancy does not occur to have an protective effect on allergic outcome in infants and children but the evidence for this is considered to be moderate. A reduction in eggallergy by supplementation is also considered to be moderate while an reduction in the severity of eczema is low.