## Breastfeeding in the prevention of allergic diseases.

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## **ABSTRACT**

There is no doubt that breast milk is the best food for infants during the first six months of life for several reasons which are nutritional, emotional, immunological and financial. However, allergic diseases have been increasing during the past thirty years and breast feeding seems not to be able to stop this worldwide phenomenon: even in totally breast fed babies allergic diseases do occur. Moreover, appropriate human studies on the anti-allergic effect of breast milk have never been published, as most studies are biased by a large number of confounders (example: in a recent observational study in our own cohort we found that eczema occurs more frequently in breast fed babies compared to non-breastfed babies). In a number of animal studies, however, the effect of breast milk on allergic sensitization has been studied. From other studies it seems that the presence of certain cytokines (such as IL-10 and TGF-beta) and certain Immunoglobulines (IgA) have a positive effect on the anti-allergic features of breast milk. Furthermore, a number of specific non-pharmacological interventions are able to improve the anti-allergic effects of breast milk. Candidates for future research on improving the antiallergic features of breast milk are: bacterial products, immunotherapy and parasitic infections. Future strategies to achieve better anti-allergic quality of breast milk will be discussed during the talk.