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Probiotics and prevention of allergic disease.

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Source

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Abstract

PURPOSE OF REVIEW:

Over the past few decades, public reports have shown increasing enthusiasm for the potential health effects of probiotics. Therefore, the purpose of this review is to focus on studies, which have addressed the use of probiotics for primary prevention of atopic diseases.

RECENT FINDINGS:

The Finnish study of Kalliomaki was the first report to describe that the frequency of atopic dermatitis in neonates treated with *Lactobacillus rhamnosus* GG (LGG) was half that of the placebo. Recently, these results have been questioned by two trials, which reported no difference in the development of atopic dermatitis in neonates supplemented with LGG and *L. acidophilus*, respectively. In contrast, an unexpected increase in respiratory side-effects was observed in some studies in children who received the probiotics. Up to now no data have been released which report a positive effect of probiotics for the prevention of allergic rhinitis or asthma. Moreover, an allergen-preventive effect of probiotics for the development of atopic dermatitis could not be consistently established.

SUMMARY:

In conclusion, probiotics cannot be generally recommended for primary prevention of atopic disease. Further studies should clarify if any susceptible subgroups exist and how these subgroups benefit from supplementation with certain probiotic strains. Moreover, the selection of the most beneficial probiotic strain or the composition of different probiotics and/or prebiotics, the dose and the timing of supplementation still need to be determined.

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