Probiotic Supplementation in the First 6 Months of Life in at Risk Asian Infants: Effects on Eczema and Atopic Sensitization at the Age of 1 Year


PURPOSE OF THE STUDY. To determine the effect of probiotic supplementation from birth to 6 months of age on eczema and allergic sensitization at 1 year of age in Asian infants at risk of allergic disease.

STUDY POPULATION. A total of 253 infants with a family history of allergic disease, defined as having a first-degree relative with doctor-diagnosed asthma, allergic rhinitis, or eczema, and positive skin-prick test result to dust mite, were voluntarily recruited prenatally at the clinics or eczema, and positive skin-prick test result to dust mite, were voluntarily recruited prenatally at the clinics. The method of evaluation of sibling exposure quantifies both timing and dose and helps to pinpoint a potentially fruitful area for further research (before 2 years). One limitation is that the specific viral infections recorded for this study did not include viruses that primarily cause airway damage, such as respiratory syncytial virus and influenza. The mechanism for the effect of tonsillectomy is open to speculation. Possibilities include its significance as a marker of antibiotic use or, alternatively, a marker of severe, repeated, upper respiratory infection resulting in inflammation and, therefore, increased risk of sensitization via increased mucosal permeability.

RESULTS. The incidence of eczema in the probiotic group (22%) was similar to that in the placebo group (25%) (odds ratio: 0.8 [95% confidence interval: 0.4–1.5]). Severity among those with eczema according to the scoring atopic dermatitis index was not significantly different ($P = .17$). The rate of sensitization at 1 year showed no difference between the 2 groups (24% [probiotic group] vs 19% [placebo]).

CONCLUSIONS. The results of this study do not support the role of early-life probiotic supplementation as a modality for primary eczema prevention.

Impact of Maternal Atopy and Probiotic Supplementation During Pregnancy on Infant Sensitization: A Double-Blind Placebo-Controlled Study


PURPOSE OF THE STUDY. To explore factors in infant sensitization and the effect of probiotics.

STUDY POPULATION. The researchers evaluated 171 mother-infant pairs from an ongoing, placebo-controlled, double-blind study with nutrition modulation through dietary counseling and probiotic supplementation.
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