

Bruzzese E *et al.*, A formula containing galacto- and fructo-oligosaccharides prevents intestinal and extra-intestinal infections: An observational study. *Clinical Nutrition* 2009; doi:10.1016/j.clnu.2009.01.008

Abstract

Background & aim: The addition of prebiotics to infant formula modifies the composition of intestinal microflora. Aim of the study was to test the hypothesis that prebiotics reduce the incidence of intestinal and respiratory infections in healthy infants. **Methods:** A prospective, randomized, placebo-controlled, open trial was performed. Healthy infants were enrolled and randomized to a formula additioned with a mixture of galacto- and fructo-oligosaccharides or to a control formula. The incidence of intestinal and respiratory tract infections and the anthropometric measures were monitored for 12 months. **Results:** Three hundred and forty two infants (mean age 53.7 ± 32.1 days) were enrolled. The incidence of gastroenteritis was lower in the supplemented group than in the controls (0.12 ± 0.04 vs. 0.29 ± 0.05 episodes/child/12 months; $p = 0.015$). The number of children with more than 3 episodes tended to be lower in prebiotic group (17/60 vs. 29/65; $p = 0.06$). The number of children with multiple antibiotic courses/year was lower in children receiving prebiotics (24/60 vs. 43/65; $p = 0.004$). A transient increase in body weight was observed in children on prebiotics compared to controls during the first 6 months of follow-up. **Conclusions:** Prebiotic administration reduce intestinal and, possibly, respiratory infections in healthy infants during the first year of age.