

Knol *et al.*, Increase of faecal bifidobacteria due to dietary oligosaccharides induces a reduction of clinically relevant pathogen germs in the faeces of formula-fed preterm infants. *Acta Paediatr Suppl.* 2005; 94(Suppl 449):31-3.

Abstract

In a previous study on formula-fed preterm infants, we were able to demonstrate that dietary oligosaccharides (a mixture of 90% galacto-oligosaccharides and 10% fructo-oligosaccharides in a concentration of 1 g/dl) stimulate the growth of faecal bifidobacteria. In the present explorative analysis of this study, we focus on the effect of the dominance of bifidobacteria on the presence of clinically relevant pathogens (*Staphylococcus aureus*, *Staphylococcus epidermidis*, *Staphylococcus haemolyticus*, *Pseudomonas aeruginosa*, *Enterobacter*, *Klebsiella*, *Proteus*, *Streptococcus group B*, *Clostridium difficile*, *Bacillus subtilis* and *Acinetobacter*).

Conclusion: The data demonstrate that stimulation of bifidobacteria by prebiotic oligosaccharides reduces the presence of clinically relevant pathogens in the faecal flora, indicating that prebiotic substances might have the capacity to protect against enteral infections.