



Biome Daily Kids™ Probiotic

Condition Management Guide

To reduce the occurrence and duration of common colds



INTRODUCTION

Young children are particularly susceptible to contracting upper respiratory tract infections (URTIs), particularly if they attend childcare centres. The probiotic strain *Lactobacillus rhamnosus* GG has been clinically proven to significantly reduce the risk of URTIs in children by 38% compared to placebo (1), and significantly reduce their duration (2). We recommend Biome Daily Kids™ Probiotic as a complement to vitamin and mineral supplements and herbal preparations indicated for immune support, and as an adjunct to medicines indicated for the symptomatic relief of common colds.

In addition to enhancing the function of the immune system, supplementation with probiotics supports healthy digestive function, and has been shown to significantly reduce the risk of antibiotic-associated diarrhoea (AAD) in children by 52%, with the strongest evidence for the use of *Lactobacillus rhamnosus* GG (3). We recommend prescribing Biome Daily Kids™ Probiotic with antibiotic prescriptions to reduce the risk of antibiotic-associated diarrhoea in children.

CONSIDER AS AN ADJUNCT TO:

Antibiotics



CONSIDER AS A COMPLEMENT TO:

Multivitamin and Mineral Supplements

CAMS for Common Colds

Vitamin D Supplements

Fibre Supplements



REFERENCES

1. Liu S, Hu P, Du X, Zhou T, Pei X. *Lactobacillus rhamnosus* GG supplementation for preventing respiratory infections in children: a meta-analysis of randomized, placebo-controlled trials. *Indian Pediatr.* 2013 Apr;50(4):377-81.
2. Laursen RP, Hojsak I. Probiotics for respiratory tract infections in children attending day care centers—a systematic review. *Eur J Pediatr.* 2018 Jul;177(7):979-94.
3. Szajewska H, Canani RB, Guarino A, Hojsak I, Indrio F, Kolacek S, et al. Probiotics for the Prevention of Antibiotic-Associated Diarrhea in Children. *J Pediatr Gastroenterol Nutr.* 2016 Mar;62(3):495-506.



Biome Daily Kids™ Probiotic

Supporting clinical
research



Eur J Pediatr. 2018 Jul;177(7):979-994. doi: 10.1007/s00431-018-3167-1. Epub 2018 May 12.

PROBIOTICS FOR RESPIRATORY TRACT INFECTIONS IN CHILDREN ATTENDING DAY CARE CENTERS-A SYSTEMATIC REVIEW.

Laursen RP1, Hojsak I2,3,4.

Probiotics have been suggested to have a preventive effect on respiratory tract infections (RTIs), but limited evidence exist on strain-specific effects. The main aim of this systematic review and meta-analysis was to evaluate strain-specific probiotic effects on RTIs in children attending day care. We included 15 RCTs with 5121 children in day care settings (aged 3 months to 7 years), but due to high diversity in reported outcomes, different number of RCTs were available for evaluated outcomes. Twelve RCTs (n = 4527) reported results which could be compared in at least one outcome of the meta-analysis. Compared to placebo, *Lactobacillus rhamnosus* GG (LGG) significantly reduced duration of RTIs (three RCTs, n = 1295, mean difference - 0.78 days, 95% confidence interval (CI) -1.46; -0.09), whereas no effect was found on other evaluated outcomes. Based on the results from two studies (n = 343), *Bifidobacterium animalis* subsp. *lactis* BB-12 showed no effect on duration of RTIs or on absence from day care. Meta-analyses on other strains or their combination were not possible due to limited data and different outcome measures. **Conclusion: LGG is modestly effective in decreasing the duration of RTIs.** More RCTs investigating specific probiotic strains or their combinations in prevention of RTIs are needed. **This systematic review showed that use of *Lactobacillus rhamnosus* GG modestly reduces the duration of respiratory tract infections.**

J Pediatr Gastroenterol Nutr. 2016 Mar;62(3):495-506. doi: 10.1097/MPG.0000000000001081.

PROBIOTICS FOR THE PREVENTION OF ANTIBIOTIC-ASSOCIATED DIARRHEA IN CHILDREN.

Szajewska H, Canani RB, Guarino A, Hojsak I, Indrio F, Kolacek S, Orel R, Shamir R, Vandenplas Y, van Goudoever JB, Weizman Z; ESPGHAN Working Group for ProbioticsPrebiotics.

This article provides recommendations, developed by the Working Group (WG) on Probiotics of the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition, for the use of probiotics for the prevention of antibiotic-associated diarrhea (AAD) in children based on a systematic review of previously completed systematic reviews and of randomized controlled trials published subsequently to these reviews. The use of probiotics for the treatment of AAD is not covered. The recommendations were formulated only if at least 2 randomized controlled trials that used a given probiotic (with strain specification) were available. The quality of evidence (QoE) was assessed using the Grading of Recommendations Assessment, Development, and Evaluation guidelines. **If the use of probiotics for preventing AAD is considered because of the existence of risk factors such as class of antibiotic(s), duration of antibiotic treatment, age, need for hospitalization, comorbidities, or previous episodes of AAD diarrhea, the WG recommends using *Lactobacillus rhamnosus* GG (moderate QoE, strong recommendation) or *Saccharomyces boulardii* (moderate QoE, strong recommendation).** If the use of probiotics for preventing *Clostridium difficile*-associated diarrhea is considered, the WG suggests using *S. boulardii* (low QoE, conditional recommendation). Other strains or combinations of strains have been tested, but sufficient evidence is still lacking.