*Other Reviews - - Other Review*

# The impact of probiotics on pulmonary, gastrointestinal, and growth outcomes in pediatric cystic fibrosis: a randomized controlled trial.

**Code:** PM40437397 **Year:** 2025 **Date:** 2017 **Author:** Rahmani P

### Study design (if review, criteria of inclusion for studies)

Systematic review

### List of included studies (9)

3 pre-post studies and 6 RCT

### Participants

An electronic search of five databases and three trial databases was conducted. Studies describing the administration of probiotics to patients with CF older than 2years, with a comparator group on respiratory, gastrointestinal and nutritional outcomes were included.

### Interventions

probiotics

### Outcome measures

number of pulmonary exacerbations, gastrointestinal inflammation

### Main results

Three pre-post studies and six randomised controlled trials met the inclusion criteria. Overall studies showed a positive effect of probiotics on reducing the number of pulmonary exacerbations and decreasing gastrointestinal inflammation. There was limited effect of probiotics on other outcomes and inadequate evidence for the effects of specific probiotic species and strains.

### Authors' conclusions

The findings suggest that probiotics may improve respiratory and gastrointestinal outcomes in a stable CF clinic population with no reported evidence of harm. There is inadequate evidence at this time to recommend a specific species, strain or dose of probiotic as likely to be of significant benefit.

http://dx.doi.org/10.1186/s12887-025-05789-0

### See also

BMC Pediatr. 2025 May 28;25(1):430. doi: 10.1186/s12887-025-05789-0.

### Keywords

Probiotics; Immunoregulatory; pharmacological_intervention;