BioGaia Protectis® Embracing the joy of relief for children with functional abdominal pain disorders





30 Probiotic chewable tablets. Food supplement with sweetener Understanding and overcoming Functional abdominal pain disorders (FAPDs) is key to helping children thrive.

Functional abdominal pain is a common disorder in children that stems from disturbances in the microbiota-gut-brain axis.¹⁻³



Multiple factors, along with altered gut microbiota, contribute to the development of FAPD.¹⁻³



Gut dysbiosis



Stress Anxiety Depression



Bacterial GI infections



Inflammatory conditions

The Rome IV criteria diagnostic conditions for FAPD.⁴⁻⁶

Functional abdominal pain affects a child's health*, quality of life, school attendance, and after-school activities and may disrupt everyday family life.^{1,7}

Growing evidence suggests probiotics as a promising treatment option for FAPD.³ Unique and patended *Limosilactobacillus reuteri* (*L. reuteri*)DSM 17938 has been found to be an effective and safe probiotic in the treatment of FAPD in children.¹¹

The only Probiotic with Proven Effect in FAPD

It is the only probiotic recommended by **ESPGHAN*** for pain intensity reduction³² and by **WGO**** to alleviate symptoms and improve the quality of life in patients with FAPD.³¹

Possible underlying mechanisms of *L. reuteri* DSM 17938 effects in the management of FAPD



*ESPGHAN: European Society for Paediatric Gastroenterology, Hepatology and Nutrition. **WGO: World Gastroenterology Organisation.

L. reuteri DSM 17938 positively impacts gut health and offers relief from pain in FAPD.¹³

Reduced pain intensity with long-term use of *L. reuteri* DSM 17938

In a systematic review and meta-analysis by Trivić, nine randomised placebo-controlled trials on children with FAP were included. Three with *L. rhamnosus* GG and six with *L. reuteri* DSM 17938. The review showed that *L. reuteri* DSM 17938 can be effective in reducing pain intensity and in increasing the number of days without pain, whereas no effect was seen for LGG in FAP.



Modified from Trivić I, 2021

Reduced pain intensity and increased number of days without pain

L. reuteri DSM 17938 reduces both the severity and duration of painful episodes in FAPD.¹⁰



~50% reduction in number of pain episodes at 4 weeks.

Significant and sustained effect on abdominal pain severity compared to placebo at 8 weeks.



• Study subject 93 children, aged 6-15 years.

• The children received 1x10⁸ CFU/day of *L. reuteri* DSM 17938 (n=47), or placebo (n=46) for 4 weeks followed by a 4 week follow-up period without supplementation

L. reuteri DSM 17938 reduces pain intensity.14

Reduction in pain severity with an increased effect in the follow-up period.



*Significantly reduced pain intensity from week 0 to week 8 with *L. reuteri* Protectis

**Follow-up 4 weeks after termination of intervention

Modified from Romano C, 2014

• Study subject 56 children, aged 6 to 16 years.

• The children received 2 x 10⁸ CFU/day of *L. reuteri* DSM 17938 or placebo for 4 weeks followed by a 4-week follow-up period without supplementation

Embracing the joy of relief for children with FAPD.



BioGaia Protectis® KIDS

1 tablet=10⁸ CFU *L. reuteri* DSM 17938



Clinically proven to effectively manage FAPD^{10-12,14-18}



Reduces severity and duration of painful episodes in FAPD^{10,12,14,15}



Offers relief from pain in FAPD within 4 weeks^{10,14}





Significantly increases pain-free days^{11,13}

Formulated with exclusive and patented *L. reuteri*, a safe, natural, and gut-friendly probiotic supplement for children¹⁹⁻³⁰

Guidelines recommend *L. reuteri* DSM 17938 for children diagnosed with FAPD.^{31,32}



WGO: World Gastroenterology Organisation. ESPGHAN: European Society for Paediatric Gastroenterology, Hepatology and Nutrition.

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