Immune system effects

REFE- RENCE	STUDY OBJECTIVES	STUDY DESIGN*	SUBJECTS AND (DAILY DOSE)	RESULTS
Gutiér- rez-Castrellón P, 2014	Evaluate if daily administration of <i>L. reuteri</i> DSM 17938 reduces the frequency and duration of diarrhoea episodes and respiratory tract infections (RTI) in Mexican day school children aged 6-36 months. A cost-effectiveness analysis was also made.	R, DB, PC 3 months of intervention, follow-up at 6 months	L. reuteri: 168 (1x10° CFU) Placebo: 168	Compared to placebo: • L. reuteri significantly reduced the frequency and duration of episodes of diarrhoea and respiratory tract infection at both 3 and 6 months • The number of doctor visits, antibiotic use, absenteeism from day school and parental absenteeism from work were significantly reduced • The use of L. reuteri was associated with a reduction of costs by 36 US dollars (USD) for each case of diarrhoea, and by 37 USD for each case of RTI
Ceratto S, 2014 (abstract, substudy of Savino 2010)	If probiotic treatment for infantile colic may prevent atopic diseases (cow's milk allergy and atopic dermatitis), asthma and migraine at the age of five, and effects on growth	Original study: R, DB, PC	L. reuteri: 25 (1x10 ⁸ CFU) Placebo: 23 In 2010 50 were rando- mised at baseline and 46 analysed	The prevalence of atopic disorders was significantly lower in the <i>L. reuteri</i> group compared to placebo, with an odds ratio of 0.16. Asthma was absent in both groups and there was one case of migraine, in the placebo group. Growth was equal in the two groups, measured as BMI Z-score.
Abrahamsson TR, 2013 Substudy of Abrahamsson 2007	In a study on prevention of allergy in newborns, <i>L. reuteri</i> ATCC 55730 reduced the incidence of IgE-associated allergic disease in infancy. This treatment might therefore also reduce the risk of asthma and allergic rhino conjunctivitis in school age (at the age of 7), which this follow-up study set out to investigate. It also evaluated whether this supplementation was associated with any long-term side effects.	Original study: R, DB, PC	L. reuteri: 94 (1x10a CFU) Placebo: 90 In the 2007 trial 232 infants were randomised and 188 completed	For the allergic disease outcomes there were no differences between groups: • The prevalence of asthma was 15% in the <i>L. reuteri</i> vs. 16% in placebo group • Allergic rhino-conjunctivitis: 27% vs. 20% • Eczema: 21% vs. 19% • Skin prick test reactivity: 29% vs. 26%
Wanke M, 2012	The efficacy of <i>L. reuteri</i> DSM 17938 in prevention of nosocomial diarrhoea in hospitalized children, 1-48 months old.	R, DB, PC During hospital stay.	L. reuteri: 54 Placebo: 52	L. reuteri did not affect the incidence of hospital-acquired diarrhoeal disease.
Abrahamsson T, 2011	Prevention of allergy/atopic eczema in infants 0-2 years old.	R, DB, PC 12 months + follow-up at 24 months.	L. reuteri: 95 (1x10 ⁸ CFU) Placebo: 93	Infants with faecal <i>L. reuteri</i> the first week of life had a less allergy-prone chemokine profile in their blood at 6 months of age.
Gromert N, 2009 (abstract)	Study on <i>L. reuteri</i> as an adjunct to standard treatment of atopic eczema in 3 months—4 year old children.	R, DB, PC 12 months	L. reuteri: 25 (1x10 ⁸ CFU) Placebo: 25	L. reuteri significantly reduced: Extension of the eczema Itching and loss of sleep Skin prick test reaction to peanut allergen Total IgE at 12 months was at steady state, while it was significantly increased in the placebo group
Weizman Z, 2009 substudy of Weizman Z, 2005	To evaluate if day-care infants acquire a long- term protection against common infections, following a probiotic supplemen- tation period.	R, DB, PC Follow-up after 12 weeks.	L. reuteri: 66 (1.2x10° CFU) Bb-12: 69 (1.2x10° CFU) Control: 59	Protection only observed during supplementation period No long-term protection against common infections for any of the probiotics compared to control
Abrahamsson T, 2007	Prevention of atopic eczema in infants 0–2 years old.	R, DB, PC 12 months + follow-up at 24 months.	L. reuteri: 95 (1x10 ^a CFU) Placebo: 93	Significantly fewer in the <i>L. reuteri</i> group with lgE-associated eczema at 2 years of age. Skin prick test reactivity to allergens was less common in the <i>L. reuteri</i> vs. the placebo group, significantly so for infants with mothers with allergies The overall incidence of eczema was the same in the two groups at 2 years of age.
Weizman Z, 2005	Prevention of common infections in day-care children 4–10 months old.	R, DB, PC 12 weeks	L. reuteri: 68 (1.2x10° CFU) Bb-12: 73 (1.2x10° CFU) Control: 60	L. reuteri significantly reduced (compared to Bb-12 and control): Days with fever Need to consult doctor and need of antibiotics Absence from day-care Both probiotics significantly reduced: Episodes with fever Episodes and days with diarrhoea



Biogaia is also available in chewable tablet

Suitable for : 4 to 18 years Adults

