

The study on BioGaia's new patented strain *L. reuteri* BG-R46® published in Beneficial Microbes

We are proud to announce that the scientific rationale and identification of our newly patented strain, *Limosilactobacillus reuteri* BG-R46®, has been published in the prestigious journal, Beneficial Microbes. This next-generation strain will be featured in our upcoming baby drops product.

Developed by BioGaia AB (NASDAQ: BIOG) and a research team at the Swedish University of Agricultural Sciences in Uppsala, led by Prof. Stefan Roos, who also oversees BioGaia's preclinical studies. BG-R46® is an evolved derivative of *L. reuteri* DSM 17938, obtained through selective exposure to bile, a major stressor in the infant gastrointestinal tract. This process yielded a strain with significantly enhanced bile tolerance, a trait that supports improved survival and colonization in the gut.

In addition to its resilience, *L. reuteri* BG-R46® demonstrates potentiated production of adenosine, a powerful signaling molecule known for its anti-inflammatory properties and broader physiological roles. Notably, the enzyme 5'-nucleotidase, responsible for adenosine synthesis, was found to be upregulated in large-scale production batches of BG-R46®, indicating robust bioactivity.

The publication outlines comprehensive genomic, phenotypic, and human safety assessments, confirming that BG-R46® is a biologically distinct, well-characterized, and safe strain for human use. It also builds on previous findings that BG-R46® produces extracellular membrane vesicles with enhanced functional properties¹.

This milestone reinforces our commitment to advancing microbiome science, delivering clinically validated probiotic solutions, and maintaining our position as both a global leader in the field and a trusted brand among consumers and healthcare professionals.

¹ Extracellular membrane vesicles from *Limosilactobacillus reuteri* strengthen the intestinal epithelial integrity, modulate cytokine responses and antagonize activation of TRPV1.

Pang Y, Ermann Lundberg L, Mata Forsberg M, Ahl D, Bysell H, Pallin A, Sverremark-Ekström E, Karlsson R, Jonsson H, Roos S.

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Study reference: <https://brill.com/view/journals/bm/aop/article-10.1163-18762891-bja00101/article-10.1163-18762891-bja00101.xml?ebody=full%20html-copy1>

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About BioGaia

BioGaia is a Swedish probiotic company that has been at the forefront of microbiome research for more than 35 years. BioGaia develops, manufactures, markets, and sells probiotic products focused on gut health, immune health, and oral health. The products are sold through local distribution partners or via own distribution in over 100 markets. The class B share of the Parent Company BioGaia AB is quoted on the Mid Cap segment of Nasdaq Stockholm. biogaigroup.com