

## BioGaia's probiotic Protectis increases SARS-CoV-2 antibody response in adults

**A randomised, triple-blinded, placebo-controlled study with BioGaia's probiotic Protectis was shown to increase SARS-CoV-2 antibody titres in healthy volunteers when 28 days or more had elapsed from vaccination. It suggests that probiotic supplementation may enhance the long-term protection against breakthrough infections.**

The study included 159 healthy adults without prior SARS-CoV-2 infection or COVID-19 vaccination. The participants consumed either BioGaia Protectis (*Limosilactobacillus reuteri* DSM 17938) + 10 microgram vitamin D3, or a placebo product that contained only vitamin D3 for 6 months. During the intervention period 12 subjects were infected, and 17 were fully vaccinated and sampled 28 days or more postvaccination.

The purpose of the study was to investigate the effect of probiotic supplementation of BioGaia Protectis on SARS-CoV-2 specific antibody responses after natural infection or vaccination. Even though the primary outcome, based on infected subjects, failed to reach a statistically significant difference between the intervention groups, vaccinated individuals who consumed BioGaia Protectis showed significantly increased IgA antibody levels when 28 days or more had elapsed from vaccination.

The study was conducted at the Nutrition-Gut-Brain Interactions Research Centre, Örebro University, Sweden.

"To our knowledge, this is the first study to investigate the effect of probiotic supplementation on different SARS-CoV-2 antibody classes, including virus neutralising antibodies in a antibody-naïve cohort", says Prof. Robert Brummer, one of the researchers behind the study.

The results suggest that BioGaia Protectis may improve long-term protection against breakthrough infections after vaccination. The same type of antibodies that are increased by probiotics in this study have previously been shown to be protective against breakthrough infections.

### **Already known on this topic**

Probiotics have been shown to protect against respiratory tract infections and increase the efficiency of certain vaccinations. In a previous clinical study, BioGaia's probiotic Protectis was shown to reduce absenteeism from work due to common infections. Vitamin D3 is important for the immune system and has a significant role in the defence against COVID-19.

The study was published online on July 4, 2023, in Gut Microbes. Link [here](#).

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**About BioGaia**

BioGaia is an innovative Swedish healthcare company that develops, markets, and sells probiotic products with documented health benefits. 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.

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