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*New research shows that Lactobacillus GG (LGG), a strain of probiotics, may decrease risk of upper respiratory tract infections in children attending day care.*

## PROBIOTICS HELP REDUCE UPPER RESPIRATORY TRACT INFECTIONS IN DAY CARE CHILDREN

New research published in the Clinical Nutrition journal shows that Lactobacillus GG (LGG), a strain of probiotics, may decrease the risk of upper respiratory tract infections in children attending day care centers. The researchers also found that the rate of absence due to infection was lower in children receiving LGG when compared to placebo.

281 day-care attending children in Croatia, were selected to participate in this randomized, double-blind, placebo-controlled trial. Over three months, the treatment group (139 children) received LGG in 100 mL of a fermented milk product. A matching placebo group (142 children) received the same fermented milk product, but without LGG. The children were not allowed to consume any other probiotic or prebiotic products during the study.

During the study, parents were contacted every 10 days and asked whether their child had developed any infections or side effects. Local doctors were responsible for the diagnosis and care of each child, and they were asked to record details of any infections the children experienced during the study period.

At the end of the three-month trial period, the authors found that children in the LGG group had a significantly reduced risk of upper respiratory tract infections when compared to placebo. However, they noted that there was no risk reduction in regard to lower respiratory tract infections as a result of the consumption of the LGG.

The researchers noted several limitations to their study, including the fact that diagnosis and treatment of the children was based only on the clinical judgment of local doctors. Additionally, the rate of severe infections was very low and, therefore, no clear effect of LGG could be proven. They also reported that since the study was conducted during the winter period (November to February), the season with highest risk of gastrointestinal infections (summer) was not included.

Nevertheless, as the paper's conclusion states, "considering the significant decrease in the number of upper respiratory tract infections in children treated with LGG and knowing that the number needing treatment (NNT) was only five, we can recommend treatment with LGG as a valid measure for the prevention of upper respiratory tract infections in children who attend day care centres."

< Hojsak I, Snovak N, Abdović S, Szajewska H, Mišak Z, Kolače S. Lactobacillus GG in the prevention of gastrointestinal and respiratory tract infections in children who attend day care centres: A randomized, double-blind, placebo-controlled trial. Clin Nutr. Epub ahead of print (paper accepted 28 September 2009). >