# Exopolysaccharides Produced by Lactic Acid Bacteria of Kefir Grains

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A *Lactobacillus delbrueckii* subsp. *bulgaricus* HP1 strain with high exopolysaccharide activity was selected from among 40 strains of lactic acid bacteria, isolated from kefir grains. By associating the *Lactobacillus delbrueckii* subsp. *bulgaricus* HP1 strain with *Streptococcus thermophilus* T15, *Lactococcus lactis* subsp. *lactis* C15, *Lactobacillus helveticus* MP12. and *Sacharomyces cerevisiae* A13, a kefir starter was formed. The associated cultivation of the lactobacteria and yeast had a positive effect on the exopolysaccharide activity of *Lactobacillus delbrueckii* subsp. *bulgaricus* HP1. The maximum exopolysaccharide concentration of the starter culture exceeded the one by the *Lactobacillus delbrueckii* subsp. *bulgaricus* HP1 monoculture by approximately 1.7 times, and the time needed to reach the maximum concentration (824.3 mg exopolysacharides/l) was shortened by 6 h. The monomer composition of the exopolysaccharides from the kefir starter culture was represented by glucose and galactose in a 1.0:0.94 ratio, which proves that the polymer synthesized is kefiran.