Effect of glycooligosaccharide(GOS) on intestinal bacterial population of broiler chickens

Hee-Sun Lee^{1,2}, Young-Hwan Moon^{1,3}, Xing-Ji Jin^{1,4}, Doman Kim^{1,5,6}

¹Laboratory of Functional Carbohydrate Enzyme and Microbial Genomics,

²Department of Molecular Biotechnology, ³Department of Material Chemical and Biochemical Engineering, ⁴Department of Fine Chemical Engineering,

⁵School of Biological Sciences and Technology, and Institute of Bioindustrial Technology, Chonnam National University, Gwang-Ju, 500-757, Korea. ⁶Biology Research Center for Industrial Accelerator, Dongshin University, Naju, Jeonnam, 520-714, Korea.

TEL:+82-62-530-0874, FAX:+82-62-530-1869

Abstract

The influence of glycooligosaccharides (GOS) on the population of the intestinal microflora were examined. Chickens were fed a basal diet with or without 2% BGOS. Addition of 2% GOS stimulated health-promoting bacterial growths (*Bifidobacteria sp.* and *Lactobacilius sp.*), while reduced the growth of food-borne pathogens (*Escherichia* and *Salmonella*) in the cecal digesta. In vitro competition experiments with *Bifidobacteria infantis* and *Salmonella typhimurium* were performed with glucose or GOS as the primary 2% of carbon source. The CFU (log10 colony forming units per ml) of *S. typhimurium* with GOS was decreased compared to that of glucose.

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