Health status of BALB/c mice orally fed with Bifidobacterium Pseudocatenulatum G4.

ABSTRACT

Safety profiles of Bifidobacterium pseudocatenulatum G4 and commercial Bifidobacterium longum B536 were evaluated. Groups of BALB/c mice were orally administered sterile skim milk suspensions containing viable B. pseudocatenulatum G4 at 2 x 104, 1 x 108, or 1 x 1011 CFU/day and reference B. longum BB536 at 1 x 108 CFU/day for four weeks. None Bifidobacterium supplemented was used as control. No abnormal clinical signs were revealed during the assessment. There were no noticeable dif erences in food intake; water intake and weight gain between treatment groups. Feeding with strain G4 did not cause any changesin blood biochemistry (Albumin, Glucose, Cholestrol, and Total protein) or haematological (Red blood cell (RBC), Protein cell volume (PCV), haemoglobin, Mean corpuscular volume (MCV), Mean corpuscular haemoglobin concentration (MCHC), White blood cell (WBC), Neutrophils, Lymphocytes, Monocytes, and Eosinophils) measurements. Hence, this strain of B. pseudocatenulatum evaluated during this study; did not adversely affect the health of the mice and is likely to share the safe status of probiotic bacterium for future application.

Keyword: Bifidobacterium; Blood chemistry; Haematology.