

## 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  $2 \times 10^4$ ,  $1 \times 10^8$ , or  $1 \times 10^{11}$  CFU/day and reference *B. longum* BB536 at  $1 \times 10^8$  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 differences in food intake; water intake and weight gain between treatment groups. Feeding with strain G4 did not cause any changes in blood biochemistry (Albumin, Glucose, Cholesterol, 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.