p-115

A Growth-Promoting Effect of Chitoligosaccharide on some strains of *Bifidobacterium* spp.

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A genus *Bifidobacterium* belongs to Gram-positive anaerobic bacteria, which commonly inhabit in the intestinal tract of animal and human as well. This organism is considered to exert beneficial affect for human consumption since they lower the intestinal pH, by producing acetic and lactic acid, and thereby inhibit proliferation of harmful organisms in the niche. There is well documented that intestinal pH of breast-fed infants is lower than that of bottle-fed infants because *Bifidobacteria* constitute main flora in the extensive of breast-fed infants only. Currently, intensive research has been done to improve their slow growing behavior, on which their usefulness as food supplement has been limited so far. Of several growth-promoting substances reported previously, better growth promotion has been obtained mostly by addition of some components of human and bovine milk. In this investigation, a supplementing chitoligosacchride was tested for growth-stimulating effect on some *Bifidobacterium* spp. grown on a *Bifidobacterium* medium.