Probiotics containing complex vegetable fermented fibers (CVFF) enhanced human intestinal microflora.

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To investigate the effectiveness of combined supplementation of vegetable fermented fibers and *L. rhamnosus* GG (LGG), a crossover study was designed for evaluating gastroenterological function in healthy subjects. After one week of dietary adjustment, all subjects took 10 tablets of complex vegetable fermented fibers everyday for 3 weeks. After two weeks of washout period, subjects took 10 tablets of CVFF plus LGG (1×10^8 per tablet) for successive three weeks. Numbers of fecal *Bifidobacterium spp*., *L. rhamnosus* GG, and *Lactobacillus spp.* were determined weekly. Total anaerobic bacteria contents (TABC) and *Clostridium Perfringens* (CP) were assayed as noxious marker of microflora. A self-conscious questionnaire of gastroenterological condition was used to evaluate palatability and acceptability of subjects. Results showed health volunteers administrated with 10 tablets of CVFF for three weeks indeed increased the numbers of *Bifidobacteria* and LGG significantly and may improve intestinal microflora. However, CVFF plus LGG accelerated the progress and further decreased CP and TABC in the first week. In conclusion, the study demonstrated that combined use of vegetable fermented fibers and probiotics could improve intestinal microflora in human body without any side effects.