

Effects of Probiotics in Children with Irritable Bowel Syndrome.

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Bifidobacteria are bacteria that exist primarily in the large intestine although some also inhabit the lower part of the small intestine. To date, 28 species of bifidobacteria have been isolated from the intestines of humans and animals. The following five are the predominant species that occur in humans: Bifidobacteria bididum (bifidus), B. infantis, B. breve, B. adolescentis, and B. longum.

Lactobacillus acidophilus (LA) is one of the most prominent strains of beneficial bacteria that predominantly reside in the small intestine. They provide a number of beneficial functions and effects such as prevention of bacterial infections, enhancement of digestion and absorption of nutrients, metabolism of cholesterol, and a strengthening of the immune system. Maintaining a healthy colonization of intestinal microflora with beneficial bacteria such as L. acidophilus is a key factor in an individual's overall health.

Irritable bowel syndrome (IBS) is one of the most common gastrointestinal disorders that physicians treat. Patients with this non-life-threatening condition may present with a broad range of symptoms which typically include abdominal pain associated with altered bowel habits, including constipation, diarrhea, or alternating constipation and diarrhea, and a less common presentation of painless diarrhea. Although the symptoms are typically intermittent, they may be continuous and should be present for at least three months before the diagnosis of irritable bowel syndrome is considered.

According to a study published in the Journal of Pediatric Gastroenterology and Nutrition, some probiotics may be helpful in the management of IBS in children and teens. The randomized, double-blind, placebo-controlled, cross-over study included 59 children between the ages of four and 18 years who had been diagnosed with IBS. The participants were randomly assigned to receive either placebo or the probiotic supplement containing bifidobacteria and LA (450 billion CFU) for six weeks. At the end, after a "wash-out" period of 2 weeks, each participant was switched to the other group and followed for another 6 weeks. The results revealed that placebo was effective in some of the parameters in many of the patients, but the probiotic supplement was significantly superior to it in the primary endpoint, which was the subjective assessment of relief of symptoms. Probiotics were also more effective than placebo in 3 out of 4 secondary endpoints, which included abdominal pain/discomfort, abdominal bloating/gassiness and family assessment of life disruption. There was no difference noticed in stool patterns between the probiotics and placebo. Since probiotics appear to be safe and more effective than placebo in the treatment of IBS, it may be a useful supplement to reduce symptoms and improve quality of life in children and adolescents with IBS.¹

1 Guandalini S, Magazzu G, Chiaro A, et al. VSL#3 improves symptoms in children with irritable bowel syndrome: a multicenter, randomized, placebo-controlled, double-blind, crossover study. J Pediatr Gastroenterol Nutr. 2010;51(1):24-30.