

## Probiotic Bacteria and IBS

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We are often asked if there is a clinical use for probiotic bacteria in patients with Irritable Bowel Syndrome (IBS). Probiotics are live micro-organisms (bacteria) which, upon ingestion, benefit the host beyond their inherent general nutrition. Probiotics are considered 'diet supplements,' and are available as capsules, tablets, gel caps, or liquids. They fall under the US Food and Drug Administration (FDA) special category of dietary supplements and are, therefore, subject to FDA jurisdiction regarding their safety, labeling and health statements.

The most studied organisms in the treatment of human intestinal diseases are the *lactobacilli* (*L. GG*, *L. plantarum*, and *L. acidophilus*) and *bifidobacteria* (*B. infantis*). The apparent success of the use of probiotics in several intestinal disorders – including chronic inflammatory bowel disease (IBD), childhood diarrhea (rotavirus infection), and travelers diarrhea – has led to increased interest in their use in patients with IBS. The data on the use of probiotics in IBS are still very limited and the results, so far, are not consistent. But, some studies show encouraging results and suggest a clinical symptomatic response and parallel improvement in quality of life. For example, one study reported a decrease in abdominal pain and bloating in patients with IBS that were treated with *lactobacillus plantarum*. Another study showed a decrease in bloating – but no effect on pain or gut transit – in IBS patients with diarrhea that were treated with a probiotic composite containing multiple bacterial strains. Growing interest in the potential health benefits of certain cretin diets and nutritional food supplements has led to a significant increase in the availability and marketing of these products to the average consumer. However, despite some of the preliminary encouraging results described above, current data do not allow a definitive conclusion or recommendation regarding the use of probiotics for the treatment of IBS. Only a few clinical trials on probiotics and IBS have been performed to date, most of them have involved only a small number of treated subjects, and they have used different bacterial strains and doses. Larger double-blind, placebo-controlled studies are still needed. Until such studies are performed and completed, the use of probiotics in the treatment of IBS should be considered speculative and experimental.

*Dr. Ringel is researching the role of bacteria in the pathogenesis of functional gastrointestinal (GI) disorders and the possible benefit of probiotic treatment for these disorders.*