



The effect of probiotic *Bacillus coagulans* Unique IS-2 vs. placebo on the symptoms management of irritable bowel syndrome in adults

Madempudi RS, Ahire JJ, Neelamraju J, Tripathi A, Nanal S. Randomized clinical trial: the effect of probiotic *Bacillus coagulans* Unique IS2 vs. placebo on the symptoms management of irritable bowel syndrome in adults. *Scientific reports*. 2019 Aug 21;9(1):1-9.

Summary:

The therapeutic effects of *B. coagulans* Unique IS2 have been well established in children with irritable bowel syndrome (IBS), but its efficacy in adults remain under reported. Thus, in this study the efficacy of *B. coagulans* Unique IS2 in the management of IBS symptoms in adults was investigated. Patients (n = 153) fulfilling Rome III criteria were provided placebo capsules for a 2 weeks run-in period. Only patients satisfying compliance criteria (n = 136) were randomized (double blind) to receive either *B. coagulans* Unique IS2 (2 billion CFU) or placebo capsules daily for 8 weeks. Reduction of abdominal discomfort/pain intensity and increase in complete spontaneous bowel movements were analyzed as primary end points. Other clinical symptoms of IBS and serum cytokines were also evaluated. *B. coagulans* Unique IS2 showed significant improvement in primary and secondary endpoints, as compared to placebo. Haematology of both the arms remained normal. No significant changes in pro- (IL-6, IL-12, TNF- α , INF- γ) and anti-inflammatory cytokine (IL-10) levels were detected at the end of *B. coagulans* treatment (8 weeks) as compared to placebo. *B. coagulans* was well tolerated with no severe adverse events to report. Overall, the results demonstrate that *B. coagulans* Unique IS2 is efficacious in the management of IBS symptoms in adults (18–60 years).
