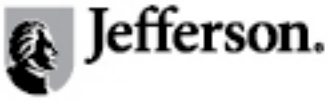

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Pilot Study of the Physiological Effects of an Integrative Medicine Approach in Irritable Bowel Syndrome

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Introduction: Irritable Bowel Syndrome (IBS) is the most common GI functional disease in the US, affecting 10-25% of the population and costing ~$1.6B in annual healthcare spending.[1] Defined by varied GI symptoms, IBS is associated with gut inflammation from many factors, including diet, microbiome imbalances, and stress. However, the disease lacks a treatment algorithm, especially within integrative medicine.[2,3]

Objective: This research explores integrative medicine approaches to IBS, including diet and supplements, to identify microbiome and symptom patterns before and after intervention.

Methods: Patients first complete surveys on diet and symptoms, the Beck depression inventory, the SF-36 questionnaire, PET-MRI imaging, and stool samples. Next, patients are counseled on the intervention, including diet, Proguard 100 probiotic (1 capsule/day), Glutacore powder (1 scoop/day), and Fiber Boost (1-3 capsules/day as tolerated). After two months, patients return for follow-up surveys, imaging, and stool samples.

Results: Data from two patients is available. Both patients demonstrated reduced *Ruminococcus* species, causing a low *Firmicutes:Bacteroidetes* (FB) ratio. Patients showed increased inflammatory markers (eg. fecal secretory IgA) and abnormal short-chain fatty acid ratios. Both patients were negative for parasites, ova, and occult blood.

Conclusion: Other IBS studies found high FB ratios, which our data contrasted with abnormally low ratios.[5] Further diet and symptom analysis is needed to understand the drivers of this ratio and how species affect colonic fermentation and absorption. The small sample size hinders understanding of whether this conflicting data is consistent across patients or if it is outlying.

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