Introduction

Irritable Bowel Syndrome (IBS):
• gastrointestinal disorder
• affects 11.2% of the population worldwide
• symptoms include abdominal pain, associated with defecation, gas and bloating
• occurring most often in women and before the age of 35
• chronic condition with no cure
• distortion in the biodiversity and composition of the gut microbiota play a fundamental role in the pathogenesis of IBS
• intense exercise can lead to gastrointestinal upset linked to the gut
• estimated 20-60% of athletes suffer from the stress caused by intense exercise
• probiotics are the most popular treatment

Null Hypothesis:
There will be no difference in the effects of the 6-month probiotic intervention Bifidobacterium longum 35624 on IBS symptoms in athletes at the University of New Mexico in Albuquerque, NM compared to those with IBS symptoms who are not athletes.

Proposed Methods

I. Population and Inclusion

Inclusion criteria: Female athletes and non-athletes, ages 18-32 years old, diagnosed with IBS (any type) based on the Rome IV criteria.

Intervention: For 6 months, participants will consume one capsule of Align brand probiotic Bifidobacterium longum 35624 daily, in the morning with breakfast.

II. Data Collection

• Study participant symptoms from diaries, questionnaires, and activity records will be measured at baseline, 2, 4, and 6 months.
• Age, gender, weight, height, activity level, diet habits, IBS symptoms (if applicable), past IBS interventions, past medical history will be collected at baseline.
• Quantitative data (questionnaires) and qualitative data (interviews, self reported food diaries & activity records) will be collected and analyzed.

Implications for Future Practice

• Results from this study may provide some evidence that may be helpful for those with IBS and may provide RDN’s a tool for treatment of symptoms.
• The study of specific strains for potential routine use will be beneficial for evidence-based guidelines in the clinical practice of Registered Dietitians.
• Future research should focus on probiotics, the microbiome, and even more specifically, probiotics and the athletes’ microbiome.

Research Question

“When taken daily before breakfast, what are the effects of the probiotic strain Bifidobacterium longum 35624 on IBS symptoms in college-aged female athletes between 18-24 compared with non-athlete college-aged females 18-24?”

References