

10<sup>th</sup> International Conference on  
**Food Science & Technology**

February 07, 2022 | Webinar

## **Supplementation with Glutamine Enhances the Effects of Low FODMAP Diet in Management of Irritable Bowel Syndrome**

**Azita Hekmatdoost**

Research Institute, ShahidBeheshti University of Medical Sciences, Iran

**Background:** Although irritable bowel syndrome (IBS) is one of the most common gastrointestinal disorders presenting to gastroenterologists, therapeutic strategies have not yet well established. Accordingly, we conducted a randomized, double-blind, placebo controlled, clinical trial to evaluate the possible superiority adding glutamine supplement to low fermentable oligo- di- mono-saccharides and polyols (FODMAP) diet in patients with IBS

**Methods:** Eligible adults were randomized to receive low FODMAP diet either with glutamine (15 gram/day) or placebo for 6 weeks. The primary end point was a reduction of  $\geq 50\%$  on the IBS Severity Scoring System (IBS-SSS). Secondary endpoints were changes in IBS symptoms and quality of life.

**Results:** Fifty patients were enrolled in the study, while 22

participants completed the study protocol in each group. The glutamine group had significant changes in total IBS-severity score, dissatisfaction of bowel habit and interference with community function (58% reduction;  $p < 0.001$ , 57% reduction;  $P < 0.001$ , 51% reduction;  $p = .043$ , respectively). Improvement in IBS-severity score of more than 50% was observed in 18 of 22 participants (82%) in glutamine group, while it was only in 6 of 22 participants (27%) in control group. No serious adverse events were observed.

**Conclusions:** Our findings indicate the superiority of adding glutamine supplementation to low FODMAP diet in amelioration of IBS symptoms, while confirming the beneficial effects of low FODMAP diet in IBS management..

e: a\_hekmat2000@yahoo.com