Background: IBS (irritable bowel syndrome) is one of the most common functional gastrointestinal disorders and prevalence in Sweden is about 13.5 percent. There are different forms of treatments to relieve the symptoms in IBS and one dietary treatment that is used is a diet low in FODMAP.

Objectives: Investigate the scientific basis for how a diet low in FODMAP affect the gastrointestinal symptoms abdominal pain and bloating in adults with IBS.

Search strategy: The search was made via the databases Scopus, Cochrane and PubMed. Keywords and MeSH-terms used in various combinations were FODMAP, IBS, irritable bowel syndrome, RCT, randomized controlled trial, symptoms and carbohydrate.

Selection criteria: Inclusion criteria: adults >18 years old, articles published in Swedish or English, humanstudies, diagnosed IBS according to the Rome III criteria, RCTs, low FODMAP diet as intervention. Exklusion criteria: Other gastrointestinal disorders, treatment with probiotica, patients with enteral and/or parenteral nutrition and articles published after 2017-03-20.

Data collection and analysis: Three articles were examined according to SBU guidelines. The evidence of the endpoints abdominal pain and bloating were examined according to GRADE.

Main results: Three RCTs showed a significant reduction of abdominal pain in a diet low in FODMAP compared to a diet higher in FODMAP. Two RCTs showed a significant reduction of bloating in a diet low in FODMAP compared to a diet higher in FODMAP. According to the quaility and results of the studies there are moderate evidence that a diet low in FODMAP can reduce abdominal pain and bloating in adults with diagnosed IBS.

Conclusions: There is moderate evidence that a diet low in FODMAP can reduce the gastrointestinal symptoms abdominal pain and bloating in adults with diagnosed IBS.

Keywords: IBS, irritable bowel syndrome, FODMAP, symptoms