

# Peppermint Oil and Probiotics Reduce the Symptoms of Adolescent Functional Gastrointestinal Disorder

Asgarshirazi M, Shariat M, Dalili H. Comparison of the effects of pH-dependent peppermint oil and synbiotic lactol (Bacillus coagulans+ fructooligosaccharides) on childhood functional abdominal pain: a randomized placebo-controlled study. Iranian Red Crescent Medical Journal. 2015 Apr;17(4).

# **Summary:**

The purpose of this study was to compare the effects of a synbiotic Lactol (Bacillus coagulans + fructooligosaccharide (FOS)), peppermint oil (Colpermin) and placebo (folic acid) on abdominal pain-related FGIDs except for abdominal migraine.

## **Patients and Methods:**

This placebo-controlled study was conducted on 120 children aged 4 - 13 years to compare the efficacy of pH-dependent peppermint oil (Colpermin) versus synbiotic Lactol (Bacillus coagulans + fructooligosaccharids (FOS)) in decreasing duration, severity and frequency of functional abdominal pain. The patients were randomly allocated into three equal groups (n = 40 in each group) and each group received Colpermin or Lactol or placebo.

### **Results:**

Eighty-eight out of 120 enrolled patients completed a one-month protocol and analyses were performed on 88 patients' data. Analyses showed that improvement in pain duration, frequency and severity in the Colpermin group was better than the placebo group (P = 0.0001, P = 0.0001 and P = 0.001, respectively). Moreover, pain duration and frequency were decreased in the Lactol group more than the placebo (P = 0.012 and P = 0.0001, respectively), but changes in pain severity were not significant (P = 0.373). Colpermin was superior to Lactol in decreasing pain duration and severity (P = 0.040 and P = 0.013, respectively). No known side effects or intolerance were seen with Colpermin or Lactol.

### **Conclusions:**

The pH-dependent peppermint oil capsule and Lactol tablet (Bacillus coagulans+ FOS) as synbiotics seem to be superior to placebo in decreasing the severity, duration and frequency of pain in abdominal pain-related functional GI disorders.