

Probiotics and chronic constipation: mechanisms of action and effectiveness

Eirini Dimidi, UK

Abstract

Chronic constipation is a prevalent gastrointestinal disorder that negatively impacts patients' quality of life. Probiotics have been increasingly investigated for their effectiveness in constipation, both in animal and human studies, and are commonly used by people with constipation as a treatment option. A systematic review and meta-analysis of 14 randomised controlled trials (RCTs) published in 2014 showed species-specific effects for *Bifidobacterium lactis* for several constipation outcomes, including gut transit time and stool frequency, whereas no effect was shown for other strains (e.g. *Lactobacillus casei* Shirota). Despite the promising findings, several RCTs have since been published demonstrating that several *B. lactis* strains have no effect in chronic constipation, highlighting the need to re-evaluate the evidence base and provide clarity on the effectiveness of probiotics. This talk aims to provide an overview of the evidence on the mechanisms of action and effectiveness of probiotics in chronic constipation, as well as to present the results of a new updated systematic review and meta-analysis in this area.