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# Systematic review: probiotics in the management of lower gastrointestinal symptoms in clinical practice – an evidence-based international guide

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## SUMMARY

### Background
Evidence suggests that the gut microbiota play an important role in gastrointestinal problems.

### Aim
To give clinicians a practical reference guide on the role of specified probiotics in managing particular lower gastrointestinal symptoms/problems by means of a systematic review-based consensus.

### Methods
Systematic literature searching identified randomised, placebo-controlled trials in adults; evidence for each symptom/problem was graded and statements developed (consensus process; 10-member panel). As results cannot be generalised between different probiotics, individual probiotics were identified for each statement.

### Results
Thirty seven studies were included; mostly on irritable bowel syndrome [IBS; 19 studies; treatment responder rates: 18–80% (specific probiotics), 5–50% (placebo)] or antibiotic-associated diarrhoea (AAD; 10 studies). Statements with 100% agreement and 'high' evidence levels indicated that: (i) specific probiotics help reduce overall symptom burden and abdominal pain in some IBS patients; (ii) in patients receiving antibiotics/*Helicobacter pylori* eradication therapy, specified probiotics are helpful as adjuvants to prevent/reduce the duration/intensity of AAD; (iii) probiotics have favourable safety in patients in primary care. Items with 70–100% agreement and 'moderate' evidence were: (i) specific probiotics help relieve overall symptom burden in some patients with diarrhoea-predominant IBS, and reduce bloating/distension and improve bowel movement frequency/consistency in some IBS patients and (ii) with some probiotics, improved symptoms have led to improvement in quality of life.

### Conclusions
Specified probiotics can provide benefit in IBS and antibiotic-associated diarrhoea; relatively few studies in other indications suggested benefits warranting further research. This study provides practical guidance on which probiotic to select for a specific problem.

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