

## Efficacy of Probiotics in the Treatment of IBD: A Meta-Analysis

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**Table 1: Characteristics of studies selected for Meta-analysis**

Study, year	Study design	Country	Sample size	Probiotic size	Probiotic strain	Dosage (CFU/D)	Duration (Weeks)	Outcome
Michail and Kenche [20]	Randomised Controlled Trials	USA	24	15	<i>B-LBi07 &amp; L-NCFM</i>	2 x 10 <sup>11</sup>	8	Relief of symptoms
Ludidi <i>et al.</i> [21]	Randomized Controlled Trials	Netherlands	40	21	<i>L. acidophilus</i> , <i>L. rhamnosus</i> , <i>L. lactis</i> , <i>L. salivarius</i> , <i>L. casei</i> , <i>Bifidobacterium lactis</i>	5 x 10 <sup>9</sup>	6	No significant reduction in pain or bloating (5 points Likert scale)
Amirimani <i>et al.</i> [22]	Randomized Controlled Trials	Iran	72	41	<i>Lactobacillus reuteri</i> (Biogaia®)	1 x 10 <sup>11</sup>	4	No significant reduction in pain or bloating (questionnaire)
Hong <i>et al.</i> [23]	Randomized Controlled Trials	Korea	70	36	<i>Bifidobacterium bifidum</i> BGN4; <i>Bifidobacterium lactis</i> AD011; <i>Lactobacillus casei</i> IBS041 and <i>Lactobacillus acidophilus</i> AD031	4 x 10 <sup>10</sup>	8	Significant reduction in pain, discomfort and abdominal bloating
Yoon <i>et al.</i> [24]	Randomized Controlled Trials	Korea	49	25	<i>B bifidum</i> , <i>B lactis</i> , <i>B longum</i> , <i>L acidophilus</i> , <i>L rhamnosus</i> , <i>Streptococcus thermophiles</i> .	1 x 10 <sup>10</sup>	4	reduction in pain or bloating and symptoms (10 points numerical scale)
Urgesi <i>et al.</i> [25]	Randomized Controlled Trials	Italy	52	26	<i>Bacillus coagulans</i> (Colinox®)	4.5 x 10 <sup>9</sup>	4	Significant reduction in discomfort, pain and bloating

Dapoigny <i>et al.</i> [26]	Randomized Controlled Trials	France	50	25	<i>L. casei variety rhamnosus</i> (LCR35)	$6 \times 10^8$	4	No significant improvements in IBS clinical score
Ki Cha <i>et al.</i> [27]	Randomized Controlled Trials	Korea	50	25	<i>L. acidophilus</i> , <i>L. rhamnosus</i> , <i>L. plantarum</i> , <i>B. breve</i> , <i>B. Longum</i> , <i>B. lactis</i> , and <i>Streptococcus thermophilus</i>	$1 \times 10^{10}$	8	The proportion of responders significantly higher in probiotics group, however individual symptom scores were similar between the two groups.
Begtrup <i>et al.</i> [28]	Randomised Controlled Trials	Denmark	131	67	<i>L. para- casei ssp paracasei F19</i> , <i>L. Acidophilus La5</i> and <i>B. Bb12</i>	$5 \times 10^{10}$	24	No significant response between the two groups.
Abbas <i>et al.</i> [29]	Randomised Controlled Trials	Pakistan	72	37	<i>S. boulardii</i>	$3 \times 10^9$	6	Significant improvements in probiotics group
Sisson <i>et al.</i> [30]	Randomised Controlled Trials	UK	186	124	<i>L. rhamnosus</i> , <i>L. plantarum</i> , <i>L. acidophilus</i> , and <i>Enterococcus faecium</i>	$1 \times 10^{10}$	12	Significant difference in symptom severity score
Wong <i>et al.</i> [31]	Randomized Controlled Trials	Singapore	42	20	VSL #3	$4.5 \times 10^{11}$	6	Abdominal pain and distension increased significantly in probiotic group
Guglielmetti <i>et al.</i> [32]	Randomized Controlled Trials	Germany	122	60	<i>Bifidobacterium bifidum</i> MIMBb75	$10^9$	4	Response (>50 % relief);Pain/bloating (a 7-point Likert scale)