

Supplementary data

The efficacy of a low-FODMAP diet in adult irritable bowel syndrome: a systematic review and meta-analysis

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Supplementary materials

Table S1 Sensitivity analysis for the primary analysis

Study out	Standardized mean difference	P value	LL	UL	I ²
Bohn (2015)	-0.71	0.001	-0.90	-0.52	32%
Eswaran (2016)	-0.68	0.001	-0.92	-0.43	58%
Halmos (2014)	-0.67	0.001	-0.91	-0.43	58%
Harvie (2017)	-0.63	0.001	-0.86	-0.40	56%
McIntosh (2017)	-0.64	0.001	-0.88	-0.41	57%
Ong (2010)	-0.60	0.001	-0.81	-0.40	46%
Paduano (2019)	-0.70	0.001	-0.93	-0.48	50%
Patcharatrakul (2019)	-0.65	0.001	-0.89	-0.41	58%
Pedersen (2014)	-0.63	0.001	-0.87	-0.40	56%
Staudacher (2012)	-0.62	0.001	-0.85	-0.40	54%
Staudacher (2017)	-0.67	0.001	-0.92	-0.43	58%
Zahedi (2018)	-0.66	0.001	-0.90	-0.41	58%

Abbreviations: LL, lower limit of 95% confidence interval; UL, upper limit of 95% confidence interval

Table S2 Sensitivity analysis for the secondary analysis

Study out	Mean difference	P value	LL	UL	I ²
Eswaran (2017)	3.87	0.02	0.71	7.03	21%
Harvie (2017)	5.09	0.02	0.90	9.28	58%
Paduano (2019)	6.39	0.004	2.00	10.77	58%
Pedersen (2014)	5.08	0.02	0.85	9.30	58%
Zahedi (2018)	6.99	0.001	3.39	10.58	18%

Abbreviations: LL, lower limit of 95% confidence interval; UL, upper limit of 95% confidence interval

Table S3 Risk of bias table for included studies

Name of first author (year)	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting bias	Other bias
Bohn (2015)	Low risk	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Eswaran (2016)	Low risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Halmos (2014)	Low risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Harvie (2017)	Low risk	Unclear risk	High risk	High risk	Low risk	Low risk	Low risk
McIntosh (2017)	Low risk	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Ong (2010)	Low risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Paduano (2019)	High risk	High risk	High risk	High risk	High risk	High risk	Low risk
Patcharatrakul (2019)	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Pedersen (2014)	Low risk	Unclear risk	High risk	High risk	Low risk	Low risk	Low risk
Staudacher (2012)	Low risk	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Staudacher (2017)	Low risk	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
Zahedi (2018)	Low risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk

Supplementary data

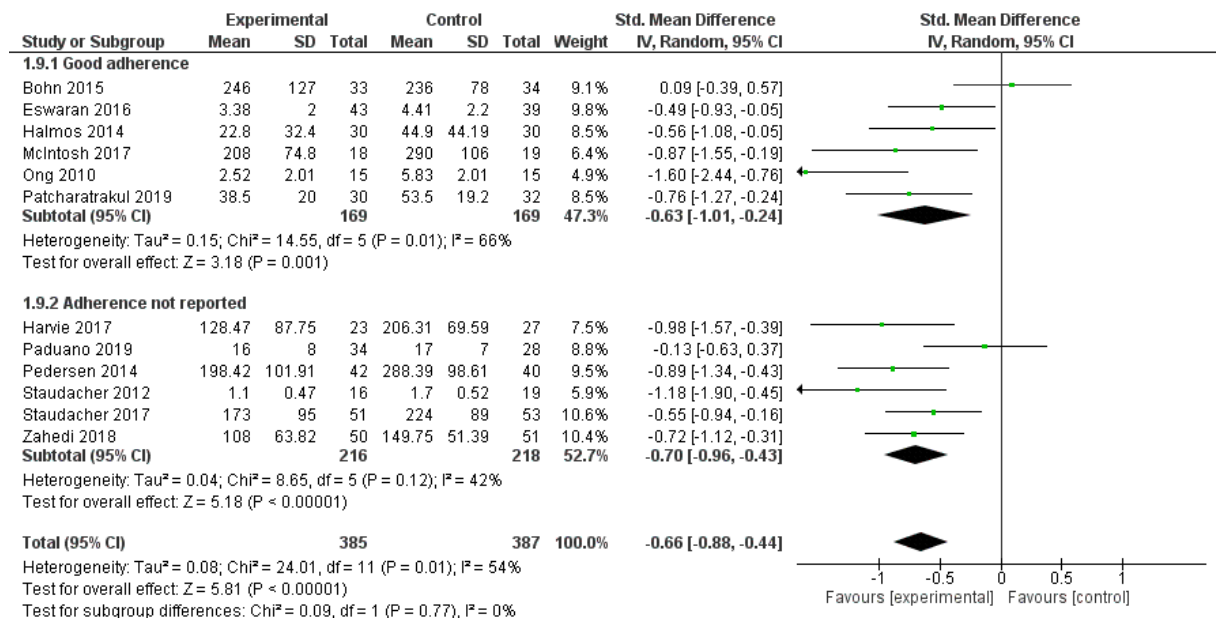


Fig. S1 Forest plot for subgroup analysis on adherence

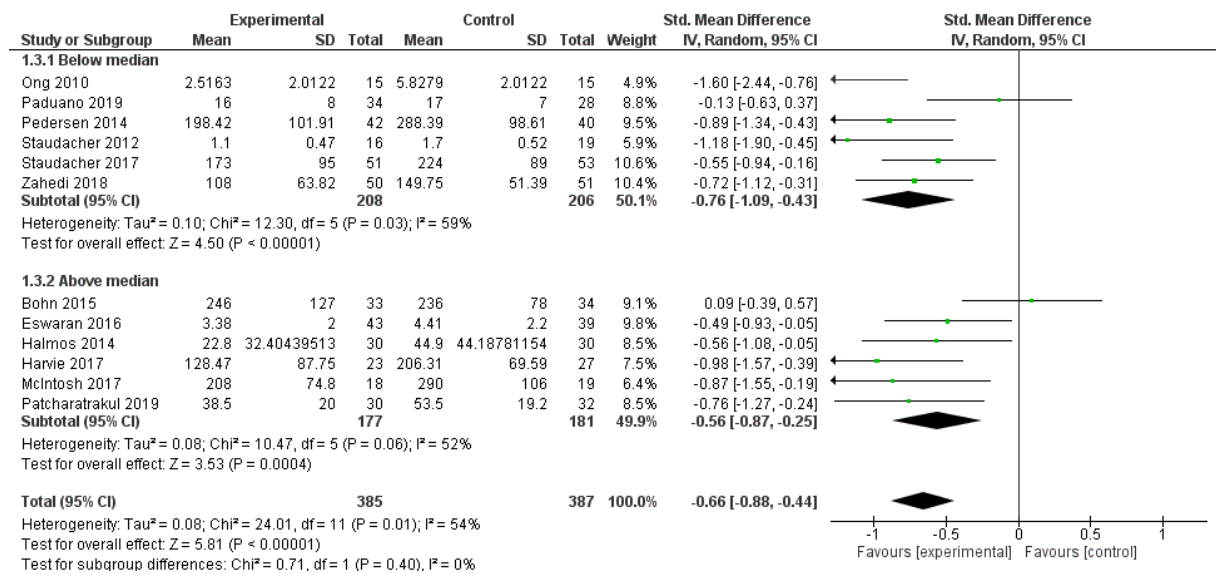


Fig. S2 Forest plot for subgroup analysis on age

Supplementary data

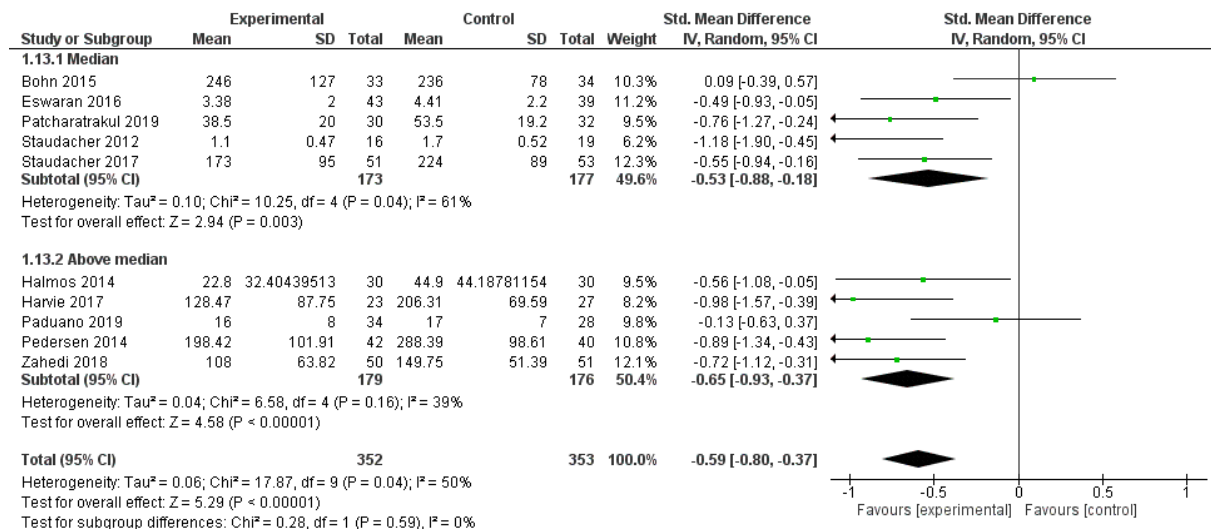


Fig. S3 Forest plot for subgroup analysis on duration

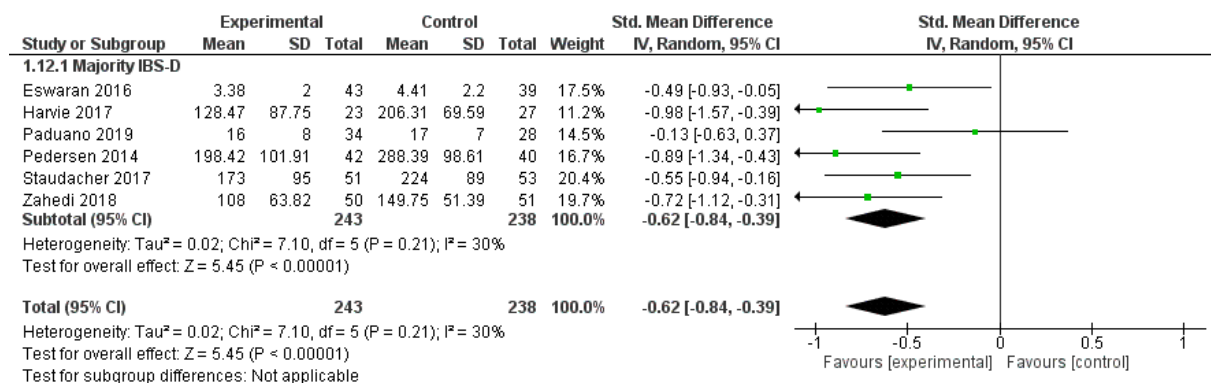


Fig. S4 Forest plot for subgroup analysis on IBS subtype

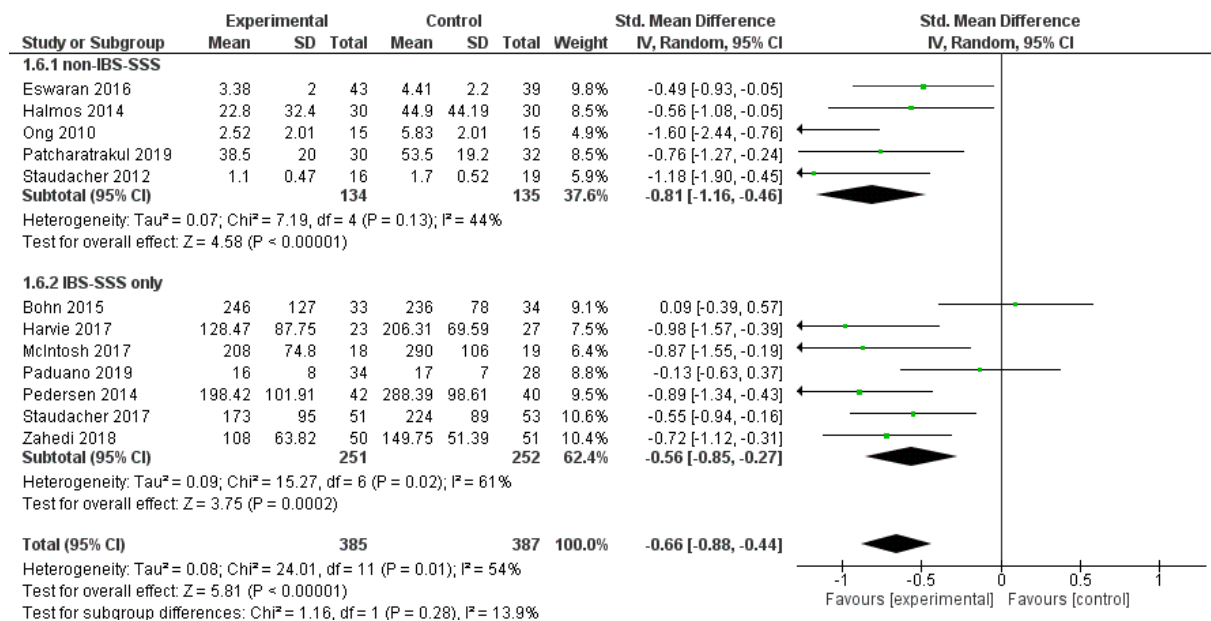


Fig. S5 Forest plot for subgroup analysis on outcome measure

Supplementary data

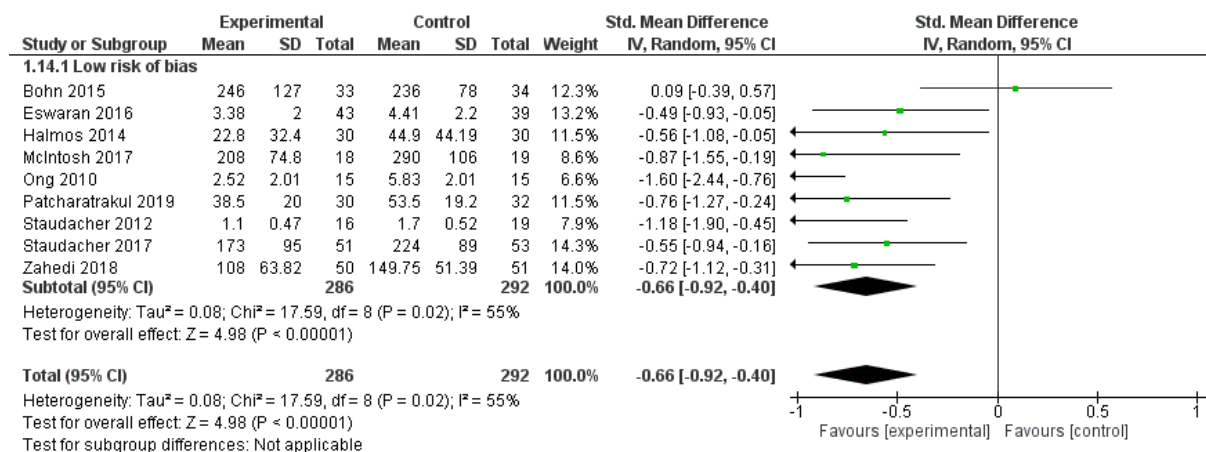


Fig. S6 Forest plot for subgroup analysis on risk of bias

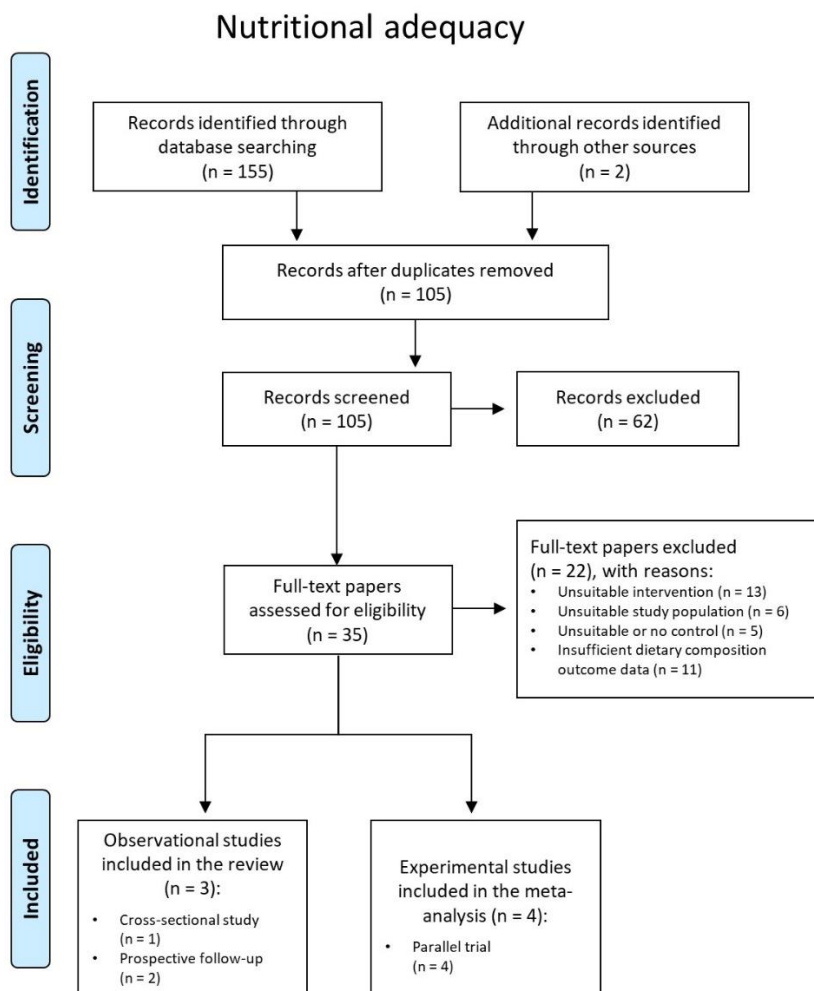


Fig. S7 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram of the study selection procedure for the analysis on nutritional adequacy effects

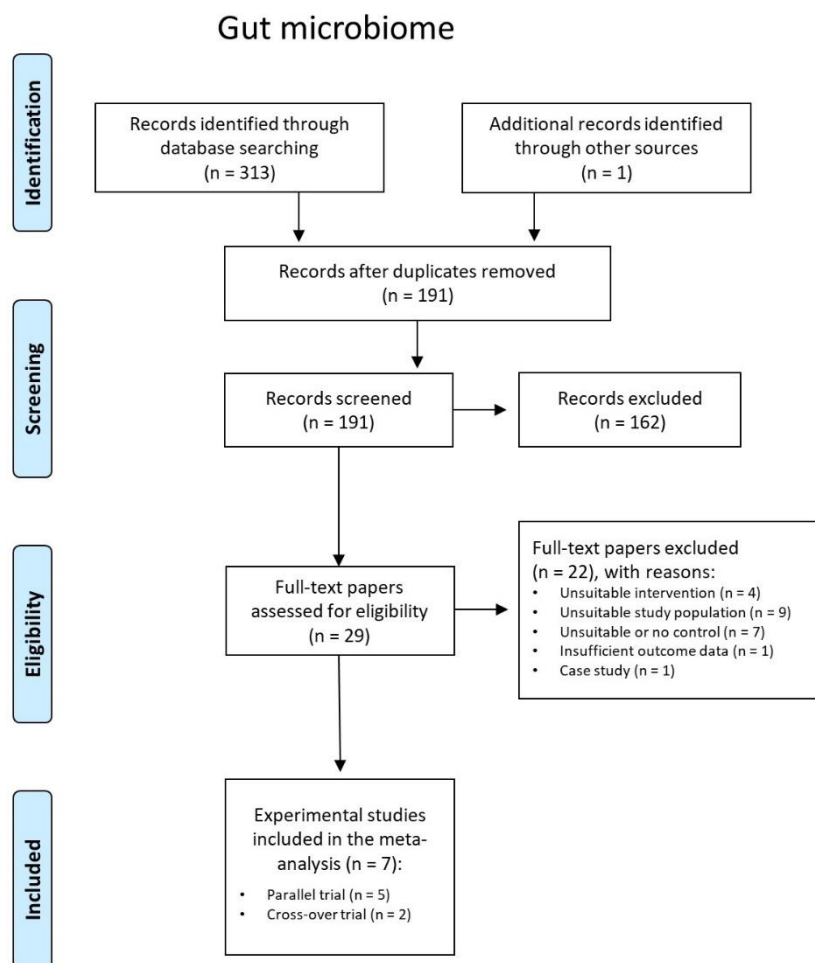


Fig. S8 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram of the study selection procedure for the analysis on gut microbiome effects

PubMed search syntaxes

(FODMAP OR FODMAPS OR saccharides OR oligosaccharide OR disaccharide or monosaccharide OR polyol OR polyols OR galacto-oligosaccharides OR fructans OR fructose OR galactans OR lactose OR sorbitol OR mannitol OR xylitol OR maltitol OR sweetener OR sweeteners OR sweetening agent) AND (IBS OR irritable bowel syndrome OR irritable colon)

(FODMAP OR FODMAPS OR "Fermentable Oligo-, Di-, Mono-saccharides And Polyols" OR "low FODMAP diet") AND (microbiota OR microbiome OR "gut microbiota" OR "gut microbiome" OR "gut flora")

(FODMAP OR FODMAPS OR "Fermentable Oligo-, Di-, Mono-saccharides And Polyols" OR "low FODMAP diet") AND (nutrient* OR "nutritional profile" OR "nutrient content" OR "nutrient composition" OR "nutritional content" OR "nutritional composition" OR "nutritional adequacy")