Supplemental Table 1. Search strategy.

|  |  |  |
| --- | --- | --- |
| PubMed/MEDLINE  | Scopus | Cochrane |
| ((((("Obesity"[Mesh] OR "Overweight"[Mesh]) OR Obesity[Title/Abstract]) OR Overweight[Title/Abstract]) OR obese[Title/Abstract]) AND ((((((((("Probiotics"[Mesh] OR "Saccharomyces"[Mesh]) OR "Lactobacillus"[Mesh]) OR "Bifidobacterium"[Mesh]) OR "Probiotics"[Title/Abstract]) OR "Saccharomyces"[Title/Abstract]) OR "Lactobacillus"[Title/Abstract]) OR "Bifidobacterium"[Title/Abstract]) OR "Synbiotics"[Mesh]) OR "synbiotics"[Title/Abstract])) AND ("Intervention Studies"[tiab] OR "intervention"[tiab] OR "controlled trial"[tiab] OR "randomized"[tiab] OR "randomised"[tiab] OR "random"[tiab] OR "randomly"[tiab] OR "placebo"[tiab] OR "assignment"[tiab] OR "supplementation"[tiab] OR trial[tiab]) | ( ( TITLE-ABS-KEY ( obesity ) OR TITLE-ABS-KEY ( overweight ) OR TITLE-ABS-KEY ( obese ) ) ) AND ( ( TITLE-ABS-KEY ( probiotics ) OR TITLE-ABS-KEY ( saccharomyces ) OR TITLE-ABS-KEY ( lactobacillus ) OR TITLE-ABS-KEY ( bifidobacterium ) OR TITLE-ABS-KEY ( synbiotics ) ) ) AND ( ( TITLE-ABS-KEY ( intervention AND studies ) OR TITLE-ABS-KEY ( intervention ) OR TITLE-ABS-KEY ( controlled AND trial ) OR TITLE-ABS-KEY ( randomized ) OR TITLE-ABS-KEY ( randomised ) OR TITLE-ABS-KEY ( random ) OR TITLE-ABS-KEY ( randomly ) OR TITLE-ABS-KEY ( placebo ) OR TITLE-ABS-KEY ( assignment ) OR TITLE-ABS-KEY ( supplementation ) ) )  | (Obesity OR Overweight OR obese) AND ("Probiotics" OR "Saccharomyces" OR "Lactobacillus" OR "Bifidobacterium" OR "synbiotics") AND ("Intervention Studies" OR "intervention" OR "controlled trial" OR "randomized" OR "randomised" OR "random" OR "randomly" OR "placebo" OR "assignment" OR "supplementation" OR trial) |

|  |  |  |
| --- | --- | --- |
| Outcomes | Egger's asymmetry test | Begg's test |
| BMI | 0.12 | 0.28 |
| WC | 0.09 | 0.93 |
| WHR | 0.74 | 0.65 |
| % Body fat | 0.21 | 0.80 |
| Adiponectin | 0.27 | 0.70 |

Supplemental Table 2. Publication bias for:

Supplemental Figures 1: Meta-regression on effect of probiotic on outcomes based on duration of intervention.

a) BMI



b) WC



c) % Body fat



d) Adiponectin



Supplemental Figures 2: Funnel plot to assess publication bias.

a) BMI



b) WC



c) WHR



d) % Body fat



e) Adiponectin



Supplemental Fig 3. Sensitivity analysis on:

a) BMI



b) WC



c) WHR



d) % Body fat



e) Adiponectin

