Higashikawa et al. 2015

Methods	RCT, (living LP28, heat-killed LP28 or a placebo powder), 12 weeks Summary risk of bias: low
Participants	Healthy volunteers between 20 and 70 years of age, with a BMI between 25 and 30 kg/m^2 N: 21 intervention, 20 control Mean age in years (SD): 52.50 (11.80) intervention, 52.80 (11.60) control Gender: 8 males/13females intervention, 7 males /13 females control Mean BMI (SD): 26.84 (0.25) intervention, 27.37 (0.32) control Location: Japan
Interventions	Type: supplement (powders) Comparison: probiotic supplementation vs. control Intervention: a 10 ml spoon for the living LP28 group daily for 12 weeks, the cell numbers in the 10 ml spoon was 10^{11}. Control: placebo powder with the same dose. Compliance: provided the measuring spoon to volunteers for the intake of LAB Length of intervention: 12 weeks
Outcomes	Main study outcome: changes in body fat, BMI, abdominal circumference, TC, LDL, HDL, TG levels and so on. Dropouts: 2 intervention Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	The study has three intervention arms (living LP28, heat-killed LP28 and a placebo powder). We only used the living LP28 as the intervention.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	The trial was designed as a double-blind, randomized, placebo-controlled parallel-group study.
Allocation concealment (selection bias)	Low risk	The allocation sequence was generated by using a Microsoft Excel randomization function. Randomization assignments were carried out by nonclinical staff who had no other involvement in the trial.
Blinding of participants and	Low risk	The subjects were blinded to

personnel (performance bias) All outcomes		treatment allocation.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	The outcome assessors were blinded to treatment allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Provided the measuring spoon to volunteers daily for 12 weeks.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Rajkumar et al. 2014

Methods	RCT, (placebo, omega-3 fatty acid, probiotic VSL#3, both omega-3 and probiotic) 6 weeks Summary risk of bias: low
Participants	healthy adult volunteers of both sexes, aged between 40 and 60 years and with BMI > 25. N: 15 intervention, 15 control Mean age in years (range): 49 years (40–60) Gender: 30 females and 30 males. Location: India
Interventions	Type: supplement (capsules) Comparison: probiotic supplementation vs. control Intervention: VSL#3 (manufactured in India by Sun Pharmaceutical Ind. Ltd.) is a freeze-dried pharmaceutical probiotic preparation containing 112.5×10^9 CFU/capsule of three strains. Subjects were instructed to take one capsule every day before any meal. Control: Identical-looking placebo capsules containing 40 mg microcrystalline cellulose were used for blinding. Subjects were instructed to take one capsule every day before any meal. Compliance: The time for each group to take capsules is strictly regulated. Length of intervention: 6 weeks
Outcomes	Main study outcome: Inflammatory Markers, Lipid Profle, Insulin Resistance, Atherogenic Index and Stool Microbiota. Dropouts: no Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	The study has four intervention arms (placebo, omega-3 fatty acid, probiotic VSL#3, both omega-3 and probiotic). We only used the probiotic VSL#3 as the intervention.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	The study was a randomized, placebo-controlled trial.
Allocation concealment (selection bias)	Low risk	Subjects were given an identification number and were assigned a treatment code by a scientist blind to the treatments corresponding with the codes.
Blinding of participants and personnel (performance bias)	Low risk	The probiotic, placebo groups and the medical doctor could be

All outcomes		blinded.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	all the investigators, including the collecting anthropometric measurement, the laboratory technician, and the statistician, were blind to the treatment.
Incomplete outcome data (attrition bias) All outcomes	Low risk	There were no dropout.
Selective reporting (reporting bias)	Low risk	The trial was registered under Clinical Trials Registry India (CTRI/2012/08/002856) (ICMR)
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow-up.
Compliance	Low risk	The time for each group to take capsules is strictly regulated.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Jung et al. 2013

Methods	RCT, (BNR17 vs. placebo) 12 weeks Summary risk of bias: moderate
Participants	obese volunteers aged 19 to 60 with body mass index⩾23 kg/m^2 N: 28 intervention, 29 control Gender: 13 males /15 females intervention, 9 males /20 females control Mean BMI (SD): 28.60 (2.20) intervention, 29.60 (3.60) control Location: Korea
Interventions	Type: supplement (capsules) Comparison: probiotic supplementation vs. control Intervention: Subjects were instructed to take 6 capsules per day which composed of 10^{10} cfu of *Lb. gasseri* BNR17 for 12 weeks. Control: placebo capsules were packaged only with the filler produced by the pharmaceutical factory. Compliance: The time for each group to take capsules is strictly regulated. Length of intervention: 12 weeks
Outcomes	Main study outcome: changes in body weight, waist and hip circumferences, blood pressure, hematology and blood chemistry. Dropouts: 3 intervention, 2 control Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	This work was supported by a grant from the Solomon Contract Research Organization and funded by Bioneer Cooperation.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This study was a randomized and placebo-controlled clinical trial.
Allocation concealment (selection bias)	Unclear risk	Not described
Blinding of participants and personnel (performance bias) All outcomes	Low risk	This study was a double-blinded clinical trial.
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	The data were analyzed using ITT and PP analysis, but unclear if blinded to allocation.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described. The intention-to-treat (ITT) analysis was used.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical

		registration number was lacked.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow-up.
Compliance	Low risk	The time for each group to take capsules is strictly regulated.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Stenman et al. 2016

Methods	RCT, (dietary fiber, *Bifidobacterium animalis ssp. lactis* 420 (B420), fiber+B420 and placebo) 6 months Summary risk of bias: low
Participants	Eligible participants were 18–65 years old with a BMI between 28.0-34.9 and a waist to hip ratio of ⩾0.88 for males and ⩾0.83 for females. N: 48 intervention, 56 control Mean age in years (SD): 50.60 (10.60) intervention, 49.90 (8.50) control Gender: 9 males /39 females intervention, 12 males /44 females control Mean BMI (SD): 31.50 (2.20) intervention, 31.20 (2.20) control Location: Finland
Interventions	Type: supplement (sachet) Comparison: probiotic supplementation vs. control Intervention: 10^{10} CFU/day in 12g of microcrystalline cellulose (B420) Control: microcrystalline cellulose 12 g/day Compliance: Participants were asked to report product intake on a specific check-list. Participants were asked to return all used and unused sachets to the site to count the number of opened sachets per the number of treatment days, and Fecal samples were analyzed for the presence of B420 with qPCR from all participant who returned a fecal sample at the six-month visit. Length of intervention: 6 months
Outcomes	Main study outcome: changes in body fat mass, anthropometric measurements, food intake and blood and fecal biomarkers. Dropouts: 7 intervention, 1 control Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	The study has four intervention arms (dietary fiber, B420, fiber+B420 and placebo). We only used the B420 as the intervention.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized Controlled Trial
Allocation concealment (selection bias)	Low risk	The randomization scheme (1:1:1:1 allocation) was generated using a computerized procedure into blocks of four randomization codes each.

Blinding of participants and personnel (performance bias) All outcomes	Low risk	The participants and the site personnel were all blinded to the randomization until the end of the intervention phase, when all data for primary and secondary outcomes, adverse events and compliance had been collected and validated.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	The study monitor, the statistician and sponsor's representatives were all blinded to the randomization until the end of the intervention phase, when all data for primary and secondary outcomes, adverse events and compliance had been collected and validated.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described. The intention-to-treat (ITT) analysis was used.
Selective reporting (reporting bias)	Low risk	The study was registered in Clinicaltrials.gov(NCT01978691).
Attention	Low risk	Participants, investigators, study monitor, the statistician and all other study personnel are masked to treatment assignment, so attention bias not feasible.
Compliance	Low risk	Participants were asked to report product intake on a specific check-list. Participants were asked to return all used and unused sachets to the site to count the number of opened sachets per the number of treatment days, and Fecal samples were analyzed for the presence of B420 with qPCR from all participant who returned a fecal sample at the six-month visit.
Other bias	Unclear risk	The commercial company was involved.

Safavi et al. 2013

Methods	RCT, (synbiotic vs. placebo) 8 weeks Summary risk of bias: low
Participants	This trial comprised 70 healthy-looking children and adolescents, aged 6–18 years, with a BMI equal to or higher than the age- and sex-specific 85th percentile N: 29 intervention, 27 control Mean age in years (SD): 10.75 (2.49) intervention, 10.09 (1.93) control Mean BMI in Z score(SD): 1.79 (0.50) intervention, 1.67 (0.39) control Location: Iran
Interventions	Type: supplement (capsules) Comparison: synbiotic supplementation vs. control Intervention: Each individual was instructed to take one capsule once a day contained $2.0*10^8$CFU before a main meal for 8 weeks. Control: Capsules contained maltodextrine and consisted of it with shape, taste and smell identical to synbiotic. Compliance: The medication compliance was tracked by weekly phone call to participants and regular stool examination for bacterial count. Length of intervention: 8 weeks
Outcomes	Main study outcome: anthropometric indexes and cardio-metabolic risk factors in obese children and adolescents. Dropouts: 14 Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	This study was supported by a grant from the Isfahan University of Medical Sciences, Isfahan, Iran.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized Controlled Trial
Allocation concealment (selection bias)	Unclear risk	Not described
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Double-blinded
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Participants and other staff involved blinded throughout the study.

Incomplete outcome data (attrition bias) All outcomes	Low risk	No problem with attrition bias
Selective reporting (reporting bias)	Low risk	Trial registry code: IRCT201103081434N4.
Attention	Low risk	All anthropometric measurements were made by the same trained person and under the supervision of the same pediatrician.
Compliance	Low risk	The medication compliance was tracked by weekly phone call to participants and regular stool examination for bacterial count.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Ipar et al. 2015

Methods	RCT, (synbiotic vs. standard) 30 days Summary risk of bias: high
Participants	This study including children and adolescents aged between 4 to 17 years old with a body mass index (BMI) >95th percentile for age and sex. N: 42 intervention, 35 control Mean BMI (SD): 27.20 (4.50) intervention, 26.30 (3.90) control Location: Turkey
Interventions	Type: supplement (sachet) Comparison: synbiotic supplementation vs. control Intervention: received a daily synbiotic supplementation which consisted of a probiotic mixture Control: standard method Compliance: Children of both groups were followed for one month, and the daily diet was controlled. Length of intervention: 30 days
Outcomes	Main study outcome: anthropometric measurements, biochemical indices, serum TAC and TOS levels Dropouts: 1 intervention, 8 control Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	The study was funded by the Eskisehir Osmangazi University Research Project.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This study was a randomized, controlled study
Allocation concealment (selection bias)	Unclear risk	Not described
Blinding of participants and personnel (performance bias) All outcomes	High risk	Open label
Blinding of outcome assessment (detection bias) All outcomes	High risk	Open label
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Trial registry code: NCT01927107

Attention	Low risk	Children of both groups were followed for one month, after which all children were re-evaluated by the same physician. All anthropometric measurements, biochemical indices, serum TAC and TOS levels were repeated.
Compliance	Low risk	Children of both groups were followed for one month, and the daily diet was controlled.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Gobel et al. 2012

Methods	RCT, (Ls-33 vs. placebo) 12 weeks Summary risk of bias: low
Participants	The study including 50 adolescents which between the age of 12 and 15 years with obesity. N: 27 intervention, 23 control Mean age in years (SD): 12.90 (1.00) intervention, 13.40 (1.10) control Gender: 11 males /16 females intervention, 11 males /12 females control Mean BMI (SD) in Z score: 2.60 (0.50) intervention, 2.60 (0.40) control Location: Denmark
Interventions	Type: supplement (capsules) Comparison: probiotic supplementation vs. control Intervention: ingested as 1 capsule containing the daily dosage of 10^{10} CFU during a period of 12 weeks. Control: consisted of filler material only Compliance: Not described Length of intervention: 12 weeks
Outcomes	Main study outcome: a series of biomarkers related to inflammation and the metabolic syndrome Dropouts: 1 intervention, 4 control Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	The study was approved by the scientific ethical committees of the Capital Region of Denmark.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, placebo-controlled intervention study
Allocation concealment (selection bias)	Low risk	The random allocation sequence was generated with blocks of 8, and done using a computer model
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Double-blinded
Blinding of outcome assessment (detection bias) All outcomes	Low risk	The grouping of study kept unavailable until data analysis was completed.
Incomplete outcome data (attrition bias)	Low risk	Participant flow well described.

All outcomes		
Selective reporting (reporting bias)	Low risk	Trial registry code: NCT 01020617
Attention	Unclear risk	Not described
Compliance	Unclear risk	Not described
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Szulińska et al. 2018

Methods	RCT, (original probiotic, low probiotic and placebo) 12 weeks Summary risk of bias: low
Participants	A total of 110 obese postmenopausal women were initially invited to participate. N: 23 intervention, 24 control Mean age in years (SD): 55.16 (6.87) intervention, 58.72 (7.25) control Gender: 23 females intervention, 24 females control Mean BMI (SD): 36.57 (5.95) intervention, 36.10 (4.37) control Location: Poland
Interventions	Type: supplement (sachet) Comparison: probiotic supplementation vs. control Intervention: received Ecologic® Barrier HD 1×10^{10}CFU per day divided in two equal doses. Control: The placebo group received the same sachets containing only the excipients, i.e., maize starch and maltodextrins. Compliance: The participants were asked to return every 4 weeks to hand back the unused sachets and be given fresh refills. Besides, they were also asked not to alter their routine physical activity and usual diets and to report any side effects. Length of intervention: 12 weeks
Outcomes	Main study outcome: the changes in lipopolysaccharides(LPS) level and cardiometabolic parameters Dropouts: 4 intervention, 3 control Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	The study has three intervention arms (original probiotic, low probiotic and placebo). We only used the original probiotic group as the intervention.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, placebo-controlled clinical trial
Allocation concealment (selection bias)	Low risk	The randomization scheme was computer-generated by Winclove using permuted blocks with block size equal to 4.
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Double-blind
Blinding of outcome	Low risk	The subjects' randomization

assessment (detection bias) All outcomes		codes were concealed until the statistical analysis.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Trial registry code: NCT03100162
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow-up.
Compliance	Low risk	The participants were asked to return every 4 weeks to hand back the unused sachets and be given fresh refills. Besides, they were also asked not to alter their routine physical activity and usual diets and to report any side effects.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Madjd et al. 2016

Methods	RCT, (probiotic yogurt(PY) vs. low-fat yogurt(LF)) 12 weeks Summary risk of bias: moderate
Participants	109 healthy overweight and obese subjects N: 44 intervention, 45 control Mean age in years (SD): 32.20 (6.94) intervention, 31.78 (6.81) control Gender: 44 females intervention, 45 females control Mean BMI (SD): 32.14 (3.20) intervention, 32.05 (3.94) control Location: United Kingdom
Interventions	Type: supplement (yogurt) Comparison: probiotic supplementation vs. control Intervention: PY was to be consumed with the main meals (200 g twice/d) daily. Control: LF was to be consumed with the main meals (200 g twice/d) daily. Compliance: Compliance was monitored once a week by telephone interviews and double-checked by using a 3-d dietary food recall questionnaire that was completed 3 times during the study period. Length of intervention: 12 weeks
Outcomes	Main study outcome: the changes in body weight, abdominal adiposity, carbohydrate and lipid metabolism Dropouts: 20 Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	The study was approved by the Ethical Committee of the Digestive Research Institute, Tehran University of Medical Science.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, controlled trial
Allocation concealment (selection bias)	Low risk	A computer-generated random-numbers method was used.
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Randomization was revealed to the participants and dietitians.
Blinding of outcome assessment (detection bias) All outcomes	High risk	Obviously not used.
Incomplete outcome data	Low risk	Participant flow well described.

(attrition bias) All outcomes		
Selective reporting (reporting bias)	Low risk	Trial registry code: IRCT201402177754N8.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow-up.
Compliance	Low risk	Compliance was monitored once a week by telephone interviews and double-checked by using a 3-d dietary food recall questionnaire that was completed 3 times during the study period.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Sanchez et al. 2013

Methods	RCT,(*Lactobacillus rhamnosus* CGMCC1.3724 (LPR) vs. placebo) 24 weeks Summary risk of bias: low
Participants	This study including subjects aged between 18 to 55 years old with a BMI between 29 and 41 kg/m^2. N: 45 intervention, 48 control Mean age in years (SD): 35.00 (10.00) intervention, 37.00 (10.00) control Gender: 24 males / 38 females intervention, 24 males / 39females control Mean BMI (SD): 33.80 (3.30) intervention, 33.30 (3.20) control Location: Canada
Interventions	Type: supplement (capsules) Comparison: probiotic supplementation vs. control Intervention: The subjects consumed two capsules which contained a formulation consisting of 10 mg of a LPR powder providing $1.62*10^8$ cfu each. Control: The placebo capsules were of the same colour and size as the LPR capsules. Compliance: A standardised 3d dietary record was obtained from each participant. In addition, the participants completed a 24 h dietary recall with the assistance of the dietitian every weeks and month. Length of intervention: 24 weeks
Outcomes	Main study outcome: the changes in body weight, body composition, physiological parameters, metabolic, inflammatory plasma markers, microbiota and so on. Dropouts: 32 Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	The present study was sponsored by The Nestle´ Research Center (Lausanne, Switzerland).

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, placebo-controlled trial
Allocation concealment (selection bias)	Low risk	The computerized randomization system was used.
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Double-blind
Blinding of outcome	Low risk	The grouping of study kept

assessment (detection bias) All outcomes		unavailable until data analysis was completed.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Trial registry code: NCT01106924
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow-up.
Compliance	Low risk	A standardised 3d dietary record was obtained from each participant. In addition, the participants completed a 24 h dietary recall with the assistance of the dietitian every weeks and month.
Other bias	Unclear risk	Personnel from funding agencies participated in the study.

Ivey et al. 2015

Methods	RCT, (probiotic yoghurt plus probiotic capsules, probiotic yoghurt plus placebo capsules, control milk plus probiotic capsules and control milk plus placebo capsules). 6 weeks Summary risk of bias: low
Participants	This study including 156 subjects overweight men and women over 55 years. N: 39 intervention, 40 control Mean age in years (SD): 65.00 (7.00) intervention, 65.00 (8.00) control Gender: 23 males / 16 females intervention, 23 males / 17females control Mean BMI (SD): 31.00 (4.00) intervention, 31.00 (4.00) control Location: Australia
Interventions	Type: supplement (capsules or yogurt) Comparison: probiotic supplementation vs. control Intervention: Capsules contained a minimum *L. acidophilus* La5 and *B. animalis subsp. lactis* Bb12 dose of $3.0*10^9$ CFU were consumed once daily for 6 weeks, 30 min prior to the first meal of the day. Control: The placebo capsules were of the same colour and size as the intervention capsules. Compliance: Participants were asked to refrain from consumption of all foods and products containing probiotic bacteria from three weeks prior to their baseline visit, and for the duration of the study. Length of intervention: 6 weeks
Outcomes	Main study outcome: blood pressure and serum lipid profile Dropouts: no Available outcomes: the final value and the baseline of TC, LDL, HDL and TG levels.
Notes	The study has four intervention arms (probiotic yoghurt plus probiotic capsules, probiotic yoghurt plus placebo capsules, control milk plus probiotic capsules and control milk plus placebo capsules). We only used the control milk plus probiotic capsules as the intervention.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, controlled trial
Allocation concealment (selection bias)	Low risk	The computer-generated random numbers was used.
Blinding of participants and	Low risk	Double-blind

personnel (performance bias) All outcomes		
Blinding of outcome assessment (detection bias) All outcomes	Unclear risk	Not described.
Incomplete outcome data (attrition bias) All outcomes	Low risk	There were no dropout.
Selective reporting (reporting bias)	Low risk	Trial registry code: ACTRN12612000033842
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Participants were asked to refrain from consumption of all foods and products containing probiotic bacteria from three weeks prior to their baseline visit, and for the duration of the study.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Agerholm-Larsen et al et al. 2000

Methods	RCT, (a yoghurt fermented with two strains of *Streptococcus thermophilus* and two strains of *Lactobacillus acidophilus* (*StLa*), a placebo yoghurt fermented with delta-acid-lactone (PY), a yoghurt fermented with two strains of *Streptococcus thermophilus* and one strain of *Lactobacillus rhamnosus* (*StLr*)). 8 weeks Summary risk of bias: low
Participants	Seventy healthy, weight-stable, overweight and obese (25.0 < BMI < 37.5 kg/m^2) males (n=20) and females (n=50), 18-55 years old. N: 16 intervention(1), 14 intervention(2), 14 control Mean age in years (SD): 38.60 (2.10) intervention(1), 37.90 (2.40) intervention(2), 39.40 (2.10) control Gender: 12 males / 4 females intervention(1), 10 males / 4 females intervention(2), 9 males / 5females control Mean BMI (SD): 30.00 (0.70) intervention(1), 30.20 (0.70) intervention(2), 30.00 (0.90) control Location: Denmark
Interventions	Type: supplement (yogurt) Comparison: probiotic supplementation vs. control Intervention(1): *StLa* for 8 weeks Intervention(2): *StLa* for 8 weeks Control: PY for 8 weeks Compliance: the compliance of the study was controlled in dietary and measuring with many methods comprehensively. Length of intervention: 8 weeks
Outcomes	Main study outcome: cardiovascular disease risk factors Dropouts: no Available outcomes: changes(the difference between the final value and the baseline) of TC, LDL, HDL and TG levels.
Notes	Sponsorship: MD Foods A/S, Denmark.

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	Randomized, compliance-controlled trial
Allocation concealment (selection bias)	Low risk	The matching was performed blinded by a person with no contact with the subjects.
Blinding of participants and personnel (performance bias) All outcomes	Low risk	Double-blind
Blinding of outcome assessment (detection bias)	Unclear risk	Not described.

All outcomes		
Incomplete outcome data (attrition bias) All outcomes	Low risk	There were no dropout.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	The compliance of the study was controlled in dietary and measuring with many methods comprehensively.
Other bias	Low risk	No commercial company involved, and no conflict of interest.