

Are all fibers created equal with respect to lipid lowering? Comparing the effect of viscous dietary fiber to non-viscous fiber from cereal sources: A systematic review and meta-analysis of randomized controlled trials. Jovanovski (2022). Supplementary Information.

Table S1. PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Line 1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Line 50
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Line 52
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Line 68
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Line 63
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Table S2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Line 79
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Line 79
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Line 86
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Line 80
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Line 92
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Line 114
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Line 104

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Section and Topic	Item #	Checklist item	Location where item is reported
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Line 106
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Line 101
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Line 101
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Line 117
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Line 125
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Line 94
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Line 135
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Fig. 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Fig. 1
Study characteristics	17	Cite each included study and present its characteristics.	Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Fig. S1
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Fig. 2
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Table 1, Fig. S1
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Fig. 2, 3, 4
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Line 188
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Line 190
Reporting	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Line 173

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Section and Topic	Item #	Checklist item	Location where item is reported
biases			
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Line 260
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Line 266
	23b	Discuss any limitations of the evidence included in the review.	Line 347
	23c	Discuss any limitations of the review processes used.	Line 353
	23d	Discuss implications of the results for practice, policy, and future research.	Line 359
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Line 61
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Line 61
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	n/a
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Line 379
Competing interests	26	Declare any competing interests of review authors.	Line 379
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Supplemental materials

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

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Table S2. Search Strategy

MEDLINE	EMBASE	COCHRANE	CINHAL
<p>exp Dietary Fiber/ Dietary fiber.mp. exp AMORPHOPHALLUS/ Amorphophallus.mp. konjac.mp. konjak.mp. konjaku.mp. glucomannan.mp. exp PSYLLIUM/ psyllium.mp. ispaghula.mp. ispagula.mp. plantago psyllium.mp. metamucil.mp. guar gum.mp. guaran.mp. exp Avena/ avena sativa.mp. oat.mp. exp HORDEUM/ hordeum.mp. barley.mp. exp beta-Glucans/ beta-glucans.mp. b-glucans.mp. exp PECTINS/ pectins.mp. 1 or 2 or 3... or 27 exp CHOLESTEROL/ cholesterol.mp. exp Cholesterol, LDL/ ldl-cholesterol.mp. low density lipoprotein cholesterol.mp. 31 or 32 or 33 exp Cholesterol, HDL/ hdl cholesterol.mp. high density lipoprotein cholesterol.mp. 35 or 36 or 37 total cholesterol.mp. exp Apolipoproteins B/</p>	<p>exp dietary fiber/ dietary fiber.mp. exp Amorphophallus/ Amorphophallus.mp. konjac.mp. konjak.mp. konjaku.mp. glucomannan.mp. exp ispagula/ ispagula.mp. ispaghula.mp. psyllium.mp. plantago psyllium.mp. metamucil.mp. exp guar gum/ guar gum.mp. guaran.mp. exp oat/ oat.mp. avena sativa.mp. exp Hordeum/ hordeum.mp. exp barley/ barley.mp. exp beta glucan/ beta-glucans.mp. b-glucans.mp. exp pectin/ pectins.mp. 1 or 2 or 3... or 29 exp cholesterol/ cholesterol.mp. total cholesterol.mp. exp low density lipoprotein cholesterol/ low density lipoprotein cholesterol.mp. ldl-cholesterol.mp. 34 or 35 or 36 exp high density lipoprotein cholesterol/ high density lipoprotein cholesterol.mp.</p>	<p>Dietary Fiber/ dietary fiber.mp. Amorphophallus/ Amorphophallus.mp. konjac.mp. konjak.mp. konjaku.mp. glucomannan.mp. psyllium.mp. Psyllium/ ispaghula.mp. ispagula.mp. plantago psyllium.mp. metamucil.mp. guar gum.mp. guaran.mp. avena sativa.mp. Avena.mp. oat.mp. Hordeum/ hordeum.mp. barley.mp. beta-Glucans/ beta-glucans.mp. b-glucans.mp. Pectins/ pectins.mp. 1 or 2 or 3... or 27 Cholesterol/ cholesterol.mp. total cholesterol.mp. Cholesterol, LDL/ ldl cholesterol.mp. low density lipoprotein cholesterol.mp. 32 or 33 or 34 Cholesterol, HDL/ hdl cholesterol.mp. high density lipoprotein cholesterol.mp. 36 or 37 or 38 apolipoprotein B.mp.</p>	<p>(MH "Dietary Fiber") dietary fiber amorphophallus konjac konjak konjaku glucomannan (MH "Psyllium") psyllium ispagula plantago psyllium metamucil guar gum guaran avena sativa (MH "Oats") oats (MH "Barley") barley hordeum beta-glucans b-glucans pectins S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 (MH "Cholesterol+") cholesterol total cholesterol (MH "Lipoproteins, LDL Cholesterol") ldl cholesterol low density lipoprotein cholesterol S28 OR S29 OR S30 (MH "Lipoproteins, HDL Cholesterol") hdl cholesterol high density lipoprotein cholesterol S32 OR S33 OR S34 (MH "Apolipoproteins") apolipoprotein B apoB S36 OR S37 OR S38 S25 OR S26 OR S27 OR S31 OR S35 OR S39</p>

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<p>apolipoproteins B.mp. apoB.mp. 40 or 41 or 42 29 or 30 or 34 or 38 or 39 or 43 28 and 44 "randomized controlled trial".pt. (random\$ or placebo\$ or single blind\$ or double blind\$ or triple blind\$).ti,ab. (retraction of publication or retracted publication).pt. 46 or 47 or 48 (animals not humans).sh. ((comment or editorial or meta-analysis or practice-guideline or review or letter or journal correspondence) not "randomized controlled trial").pt. (random sampl\$ or random digit\$ or random effect\$ or random survey or random regression).ti,ab. not "randomized controlled trial".pt. 49 not (50 or 51 or 52) 45 and 53 limit 54 to yr="2017 -Current"</p>	<p>hdl cholesterol.mp. 38 or 39 or 40 exp apolipoprotein B/ apolipoprotein B.mp. apoB.mp. 42 or 43 or 44 31 or 32 or 33 or 37 or 41 or 45 30 and 46 (random\$ or placebo\$ or single blind\$ or double blind\$ or triple blind\$).ti,ab. RETRACTED ARTICLE/ 48 or 49 (animal\$ not human\$).sh,hw. (book or conference paper or editorial or letter or review).pt. not exp randomized controlled trial/ (random sampl\$ or random digit\$ or random effect\$ or random survey or random regression).ti,ab. not exp randomized controlled trial/ 50 not (51 or 52 or 53) 47 and 54 limit 55 to yr="2017 -Current"</p>	<p>apoB.mp. 40 or 41 29 or 30 or 31 or 35 or 39 or 42 28 and 43 limit 44 to yr="2017 -Current"</p>	<p>S34 AND S41</p>
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For all databases, searches were performed through October 18, 2013 and updated October 3, 2017, November 14, 2018, May 13, 2019, and October 19, 2021.

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Table S3. Continuous *a priori* subgroup analyses

A) LDL-C

Subgroup	No. of Trials	N	β [95% CI]	P _{Effect}	Residual I ² (%)
Baseline LDL-C (mmol/L)	86	4728	-0.035 [-0.107, 0.037]	0.349	72.24
Dose (g/day)	102	5200	-0.014 [-0.024, -0.005]	0.006	66.25
Duration (weeks)	102	5200	0.000 [-0.005, 0.005]	0.950	71.75
BMI (kg/m ²)	82	4374	0.022 [-0.002, 0.046]	0.073	68.24

B) Non- HDL-C

Subgroup	No. of Trials	N	β [95% CI]	P _{Effect}	Residual I ² (%)
Baseline non-HDL-C (mmol/L)	83	3862	-0.007 [-0.079, 0.065]	0.843	79.78
Dose (g/day)	106	5070	-0.010 [-0.021, 0.002]	0.100	77.55
Duration (weeks)	106	5070	0.002 [-0.005, 0.009]	0.555	78.67
BMI (kg/m ²)	85	4298	0.016 [-0.019, 0.051]	0.363	81.69

C) ApoB

Subgroup	No. of Trials	N	β [95% CI]	P _{Effect}	Residual I ² (%)
Baseline ApoB (g/L)	21	1468	-0.002 [-0.154, 0.150]	0.983	63.79
Dose (g/day)	24	1558	-0.001 [-0.005, 0.003]	0.582	68.35
Duration (weeks)	24	1558	-0.002 [-0.007, 0.003]	0.251	72.37
BMI (kg/m ²)	17	1183	0.005 [-0.009, 0.019]	0.467	78.65

Slope (β) is derived from meta-regression analyses and represents the treatment effect of viscous fiber for each subgroup for: A) LDL-C, B) Non-HDL-C C) ApoB. The residual I² value indicates heterogeneity unexplained by the subgroup and is reported as a percent value, where I² \geq 50% indicated “substantial” heterogeneity and P < 0.10 is significant. N = number of participants in each treatment group.

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Table S4. GRADE Assessment

No. of Trial Comparisons	Study Design	Risk of Bias	Quality assessment				No. of patients		Effect Mean Difference (95% CI)	Quality
			Inconsistency	Indirectness	Imprecision	Other Considerations	Viscous Dietary Fiber	Placebo		
Effect of viscous dietary fiber on LDL-C										
102	randomised trials	not serious ^a	serious ^b	not serious	not serious	none ^c	3063	2920	-0.26 (mmol/L) (-0.30 to -0.22)	⊕⊕⊕○ MODERATE
Effect of viscous dietary fiber on Non-HDL-C										
106	randomised trials	not serious ^a	serious ^d	not serious	not serious	none ^e	3092	2948	-0.33 (mmol/L) (-0.39 to -0.28)	⊕⊕⊕○ MODERATE
Effect of viscous dietary fiber on ApoB										
24	randomised trials	not serious ^a	not serious ^f	not serious	serious ^g	none ^h	957	819	-0.04 (g/L) (-0.06 to -0.03)	⊕⊕⊕○ MODERATE

CI: Confidence interval; MD: Mean difference; MID: Minimally important difference

- No downgrade for risk of bias. Although there was evidence of high risk of bias for blinding of participants and personnel, the majority of studies had low or unclear risk of bias for this domain and all other assessed domains.
- Downgrade for serious inconsistency. There was evidence of substantial inter-study heterogeneity ($I^2 = 73\%$, $P < 0.00001$) although subgroup analyses (continuous dose, categorical dose, fiber type, and disease status) partially explained some, evidence of substantial heterogeneity remained.
- No downgrade for publication bias. Visual inspection of contour enhanced funnel plot showed signs of asymmetry, this was supported by Egger's and Begg's test ($P=0.00$; $P=0.00$, respectively). However, trim and fill method did not alter the MD.
- Downgrade for serious inconsistency, as there was evidence of substantial inter-study heterogeneity ($I^2 = 79\%$, $P < 0.00001$) although subgroup analyses (categorical fiber type, BMI, and disease status) partially explained some, evidence of substantial heterogeneity remained.
- No downgrade for publication bias. There was evidence of funnel plot asymmetry as Egger's and Begg's test were significant ($P=0.04$; $P=0.00$, respectively). However, trim and fill method did not remove or add any studies and did not alter the MD.
- No downgrade for inconsistency. Although there was evidence of substantial inter-study heterogeneity ($I^2 = 70\%$, $P < 0.00001$) after subgroup

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analyses (background diet), no evidence of substantial heterogeneity remained.

g. Downgrade for serious imprecision as the 95% CI overlaps with the MID (-0.04 g/L).

h. No downgrade for publication bias. Asymmetry was observed from the contour enhanced funnel plot, however this was only supported by Egger's and not Begg's tests ($P=0.01$; $P=0.36$, respectively). Additionally, trim and fill method did not change the direction or significance of the MD.

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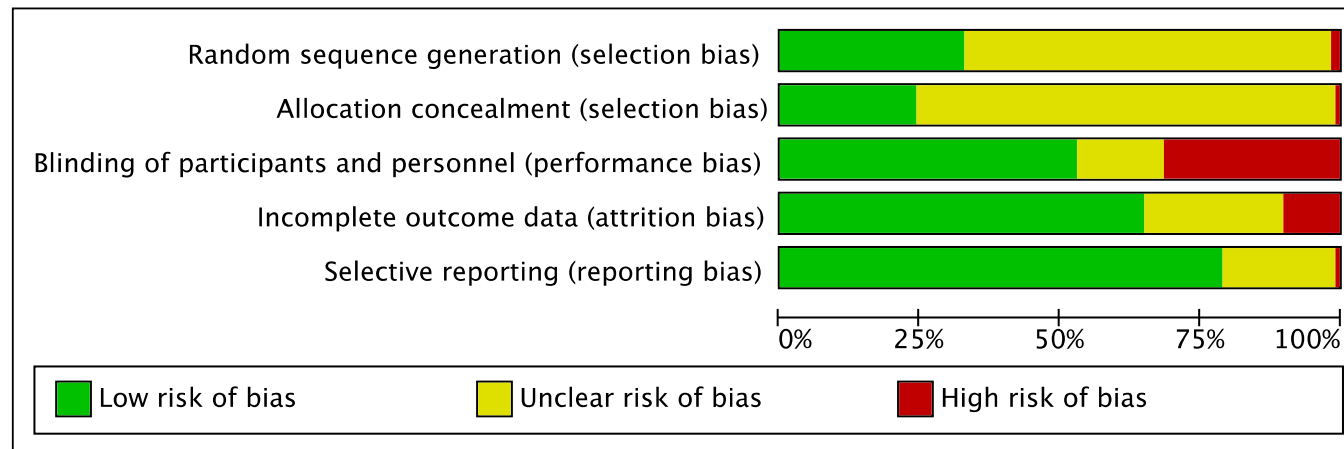
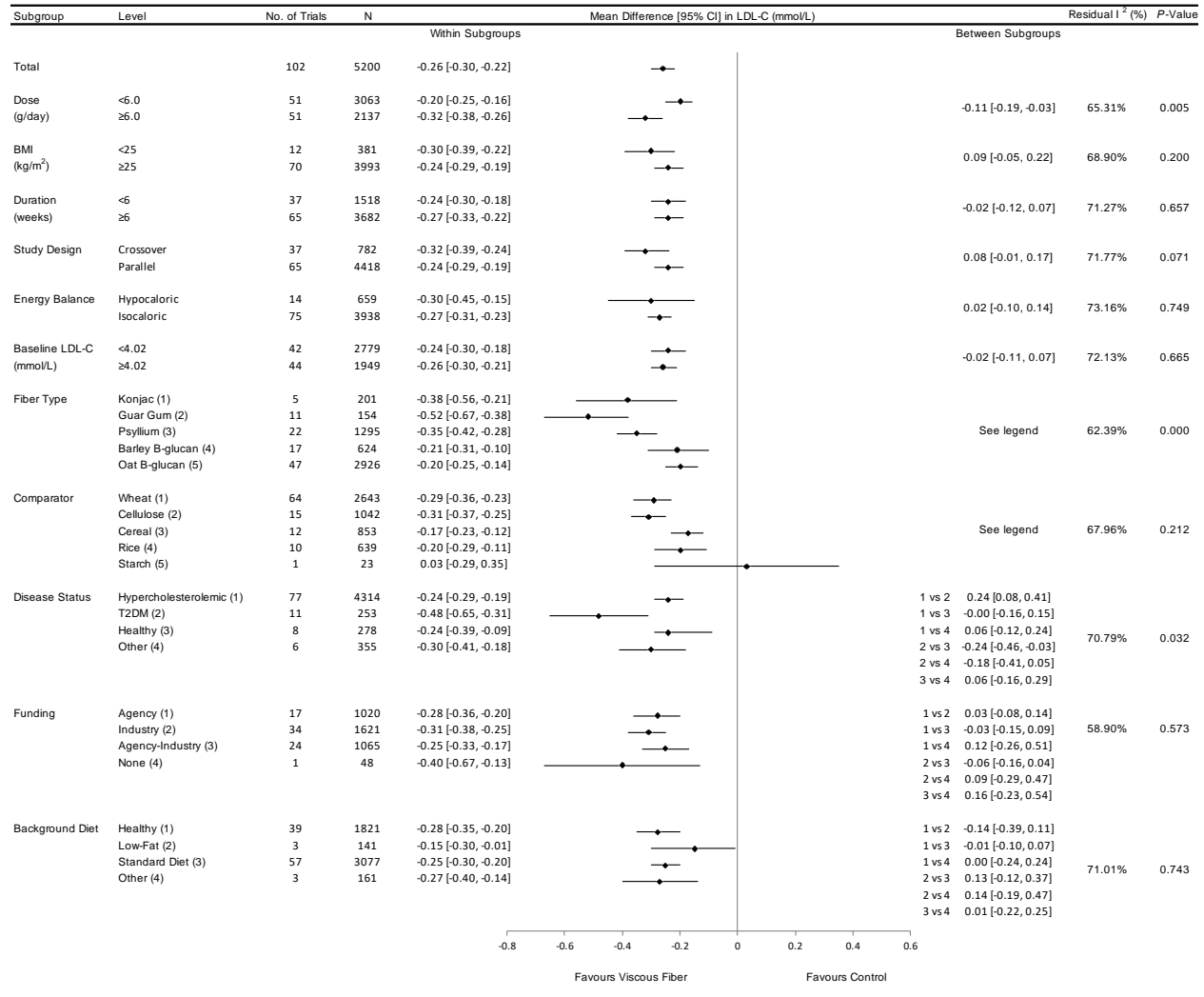


Fig S1. Cochrane Risk of bias

Risk of bias is presented as percentages across all included studies. Studies were rated “Low Risk of Bias” if the study design is unlikely to have little influence over the true outcome; “High Risk of Bias” if the design is likely to have an influential effect on the true outcome; “Unclear Risk of Bias” if insufficient information was given to assess risk.

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Legend (Fiber Type)

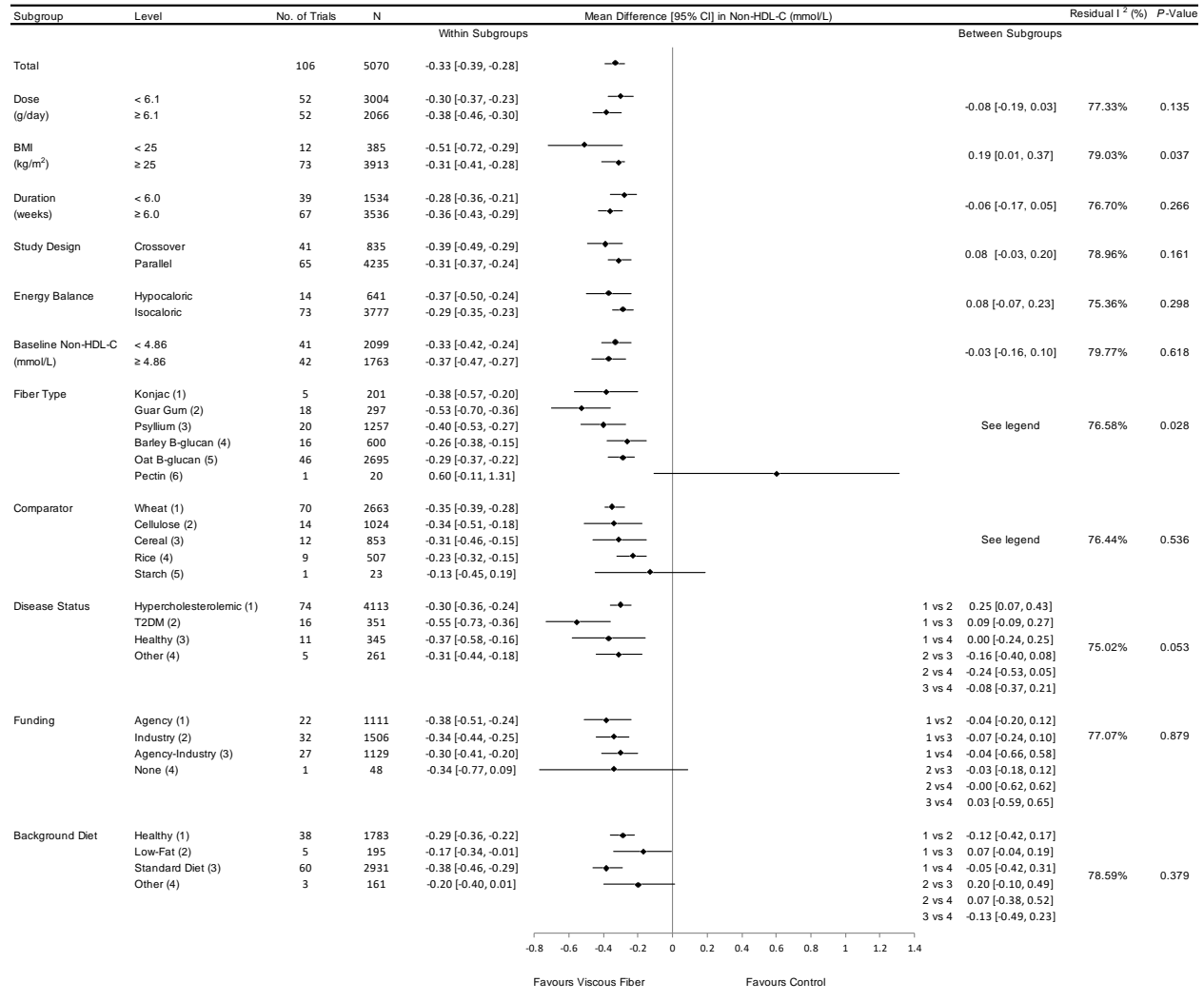
1 vs 2	0.14 [-0.10, 0.39]	2 vs 4	-0.33 [-0.52, -0.14]
1 vs 3	-0.03 [-0.22, 0.16]	2 vs 5	-0.33 [-0.51, -0.15]
1 vs 4	-0.19 [-0.38, 0.01]	3 vs 4	-0.16 [-0.28, -0.04]
1 vs 5	-0.19 [-0.37, -0.01]	3 vs 5	-0.16 [-0.25, -0.06]
2 vs 3	-0.17 [-0.36, 0.02]	4 vs 5	0.00 [-0.10, 0.10]

Legend (Comparator)

1 vs 2	0.03 [-0.09, 0.14]	2 vs 4	-0.09 [-0.25, 0.06]
1 vs 3	-0.11 [-0.23, 0.02]	2 vs 5	-0.34 [-0.79, 0.12]
1 vs 4	-0.07 [-0.20, 0.06]	3 vs 4	0.04 [-0.13, 0.20]
1 vs 5	-0.31 [-0.76, 0.14]	3 vs 5	-0.20 [-0.66, 0.25]
2 vs 3	-0.13 [-0.28, 0.02]	4 vs 5	-0.24 [-0.70, 0.22]

Fig S2. *A priori* subgroup analyses using categorical predictors to assess the effect of viscous fiber supplementation on low-density lipoprotein cholesterol (LDL-C). *Studies that included multiple comparisons were separated for subgroup analysis. Point estimates for each subgroup level (diamonds) represent the pooled effect estimates. The dashed line represents the pooled effect estimate for the overall analysis. The residual I² value indicates the inter-study heterogeneity unexplained by the subgroup. Subgroup effects were assessed by meta-regression analyses where P < 0.05 is significant.

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Legend (Fiber Type)

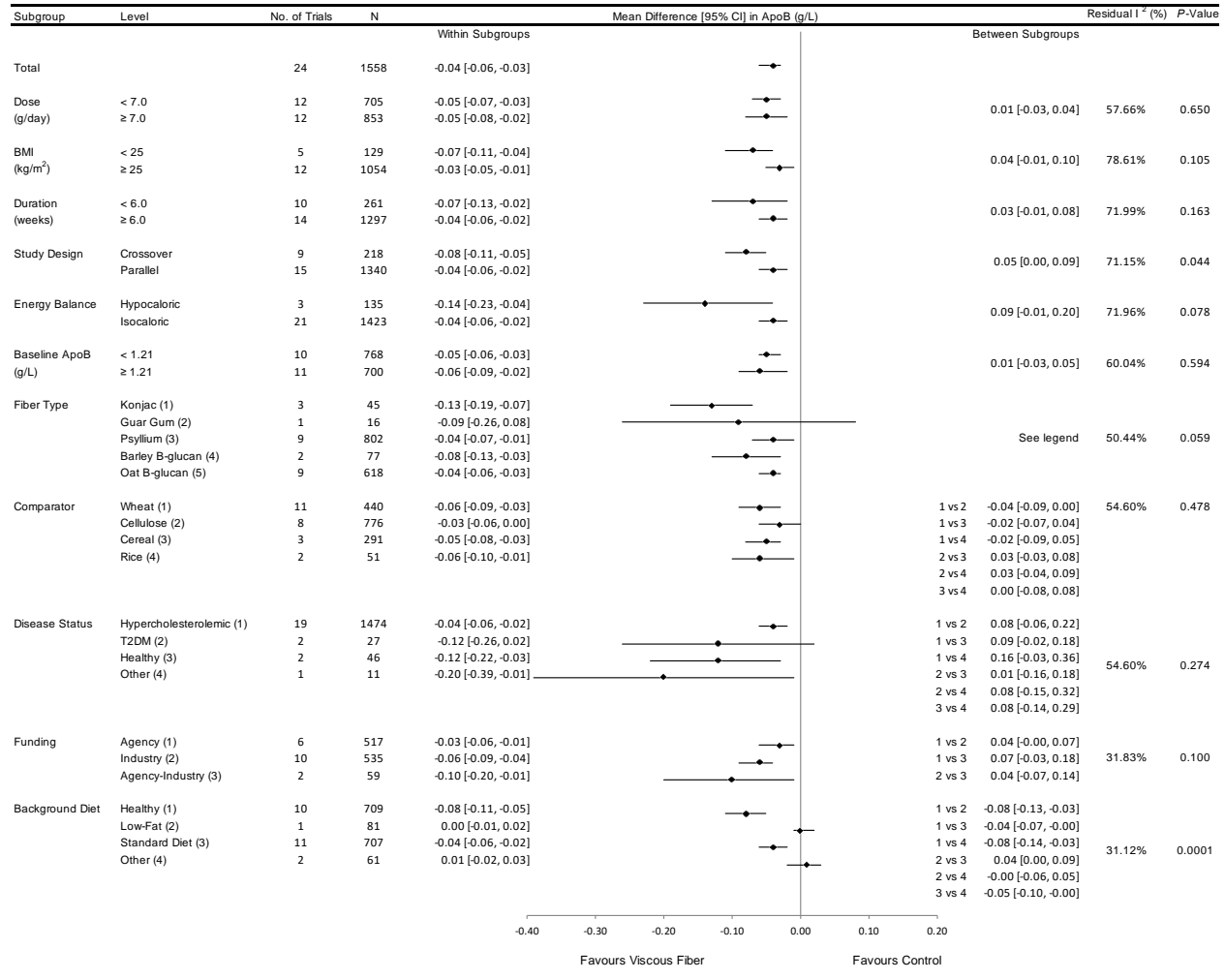
1 vs 2	0.12 [-0.18, 0.42]	2 vs 3	-0.12 [-0.34, 0.09]	3 vs 5	-0.11 [-0.25, 0.03]
1 vs 3	-0.00 [-0.27, 0.27]	2 vs 4	-0.25 [-0.47, -0.03]	3 vs 6	-1.00 [-1.84, -0.17]
1 vs 4	-0.13 [-0.40, 0.14]	2 vs 5	-0.23 [-0.43, -0.03]	4 vs 5	0.02 [-0.13, 0.17]
1 vs 5	-0.11 [-0.36, 0.14]	2 vs 6	-1.12 [-1.97, -0.28]	4 vs 6	-0.88 [-1.71, -0.04]
1 vs 6	-1.00 [-1.86, -0.14]	3 vs 4	-0.13 [-0.30, 0.05]	5 vs 6	-0.89 [-1.72, -0.06]

Legend (Comparator)

1 vs 2	-0.00 [-0.16, 0.16]	2 vs 4	-0.14 [-0.36, 0.08]
1 vs 3	-0.04 [-0.21, 0.12]	2 vs 5	-0.22 [-0.78, 0.33]
1 vs 4	-0.15 [-0.33, 0.04]	3 vs 4	-0.10 [-0.33, 0.12]
1 vs 5	-0.23 [-0.77, 0.32]	3 vs 5	-0.18 [-0.74, 0.37]
2 vs 3	-0.04 [-0.25, 0.17]	4 vs 5	-0.08 [-0.65, 0.48]

Fig S3. *A priori* subgroup analyses using categorical predictors to assess the effect of viscous fiber supplementation on non-high-density lipoprotein cholesterol (non-HDL-C). *Studies that included multiple comparisons were separated for subgroup analysis. Point estimates for each subgroup level (diamonds) represent the pooled effect estimates. The dashed line represents the pooled effect estimate for the overall analysis. The residual I² value indicates the inter-study heterogeneity unexplained by the subgroup. Subgroup effects were assessed by meta-regression analyses where P < 0.05 is significant.

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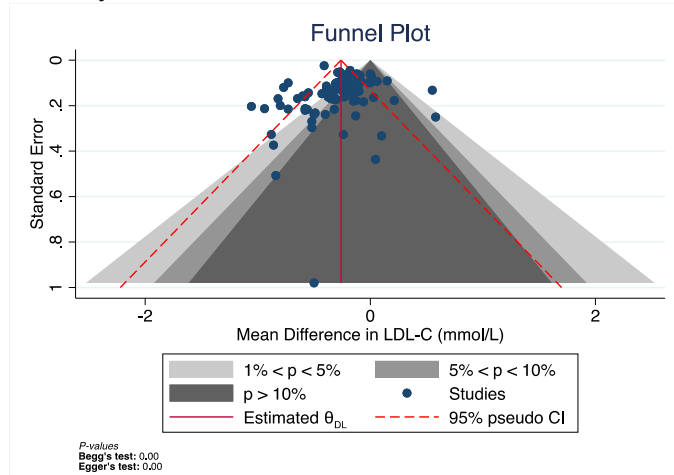
Legend

1 vs 2	-0.04 [-0.23, 0.15]	2 vs 4	-0.01 [-0.20, 0.18]
1 vs 3	-0.10 [-0.18, -0.03]	2 vs 5	-0.05 [-0.23, 0.12]
1 vs 4	-0.05 [-0.14, 0.04]	3 vs 4	0.05 [-0.02, 0.12]
1 vs 5	-0.09 [-0.17, -0.02]	3 vs 5	0.01 [-0.03, 0.04]
2 vs 3	-0.06 [-0.24, 0.12]	4 vs 5	-0.04 [-0.11, 0.02]

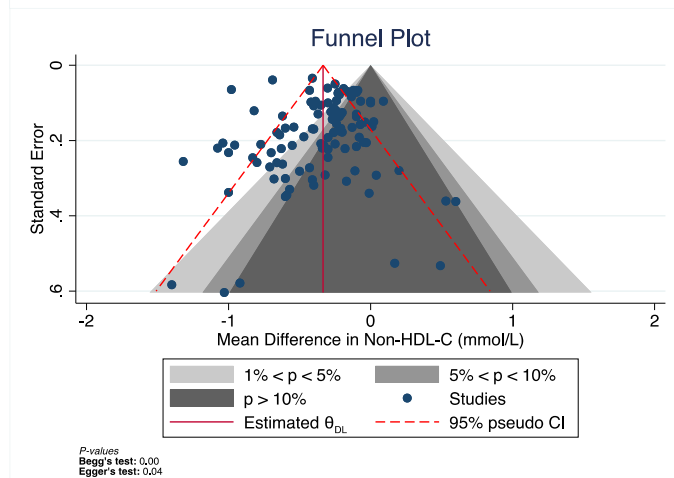
Fig S4. *A priori* subgroup analyses using categorical predictors to assess the effect of viscous fiber supplementation on apolipoprotein B (ApoB). *Studies that included multiple comparisons were separated for subgroup analysis. Point estimates for each subgroup level (diamonds) represent the pooled effect estimates. The dashed line represents the pooled effect estimate for the overall analysis. The residual I² value indicates the inter-study heterogeneity unexplained by the subgroup. Subgroup effects were assessed by meta-regression analyses where P < 0.05 is significant.

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a) LDL-C



b) Non-HDL-C



c) ApoB

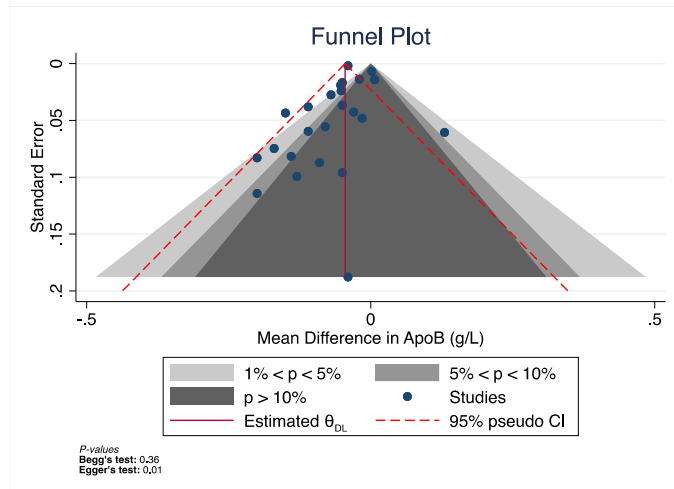
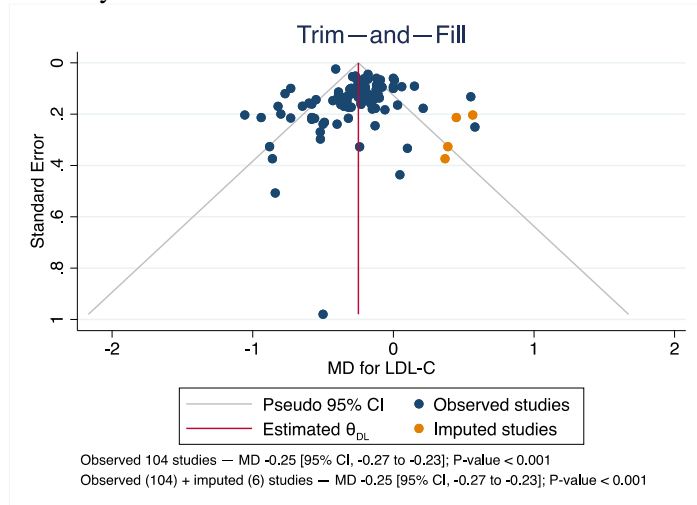


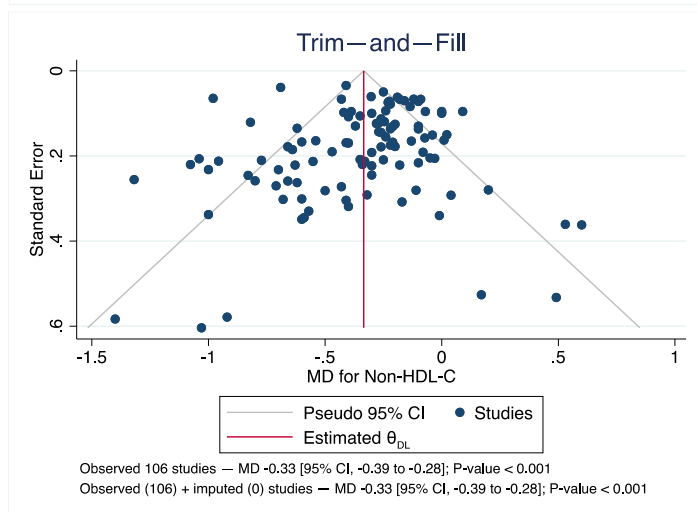
Fig S5. Contour enhanced funnel plots assessing publication bias and effect of small and/or imprecise study effects for A) LDL-C, B) ApoB, and C) Non-HDL-C. The horizontal line represents the pooled effect estimate expressed as the mean difference for each analysis. Diagonal lines represent the pseudo-95% CI. P-values are derived from quantitative assessment of publication bias by Egger and Begg tests. $P < 0.05$ is considered evidence for small-study effects.

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a) LDL-C



b) Non-HDL-C



c) ApoB

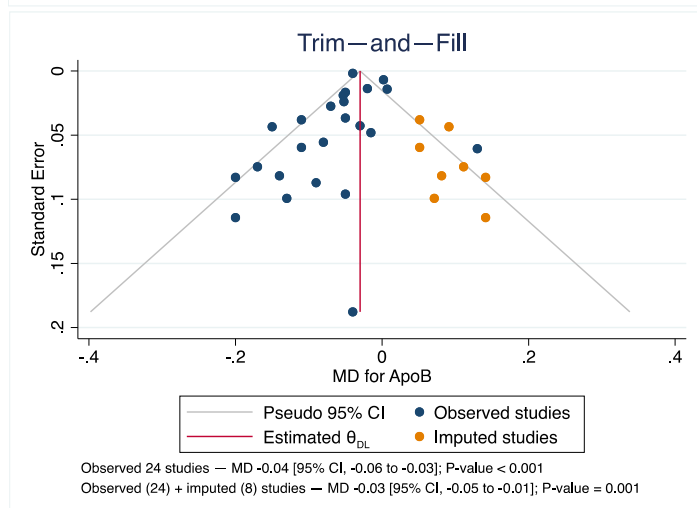
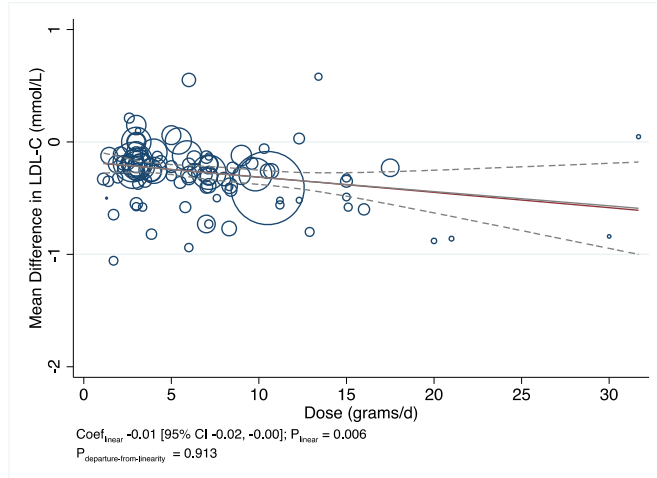


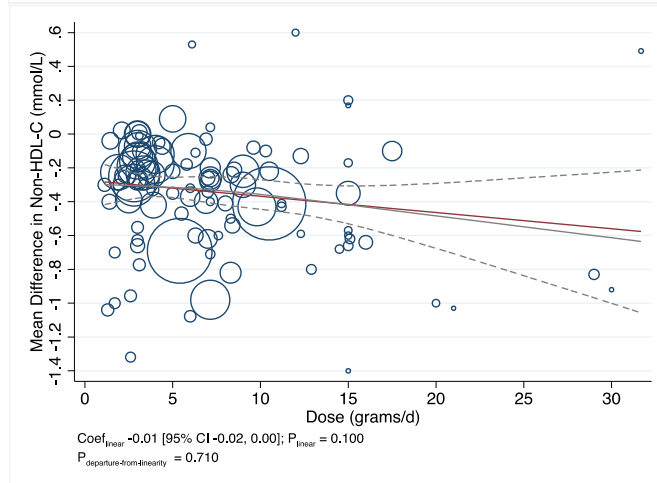
Fig S6. Funnel plot for trim-and-fill analysis of LDL-C, Non-HDL-C, and ApoB. The horizontal line represents the pooled effect estimate expressed as a mean difference, the diagonal lines represent the pseudo-95% CIs of the mean difference and the clear circles represent effect estimates for each included study.

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a) LDL-C



b) Non-HDL-C



c) ApoB

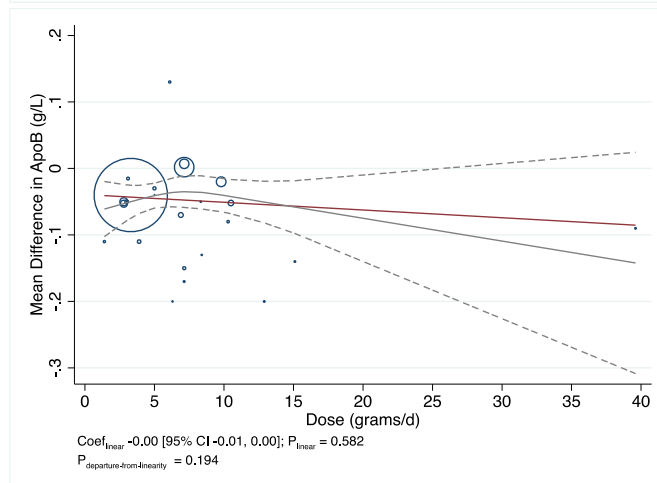
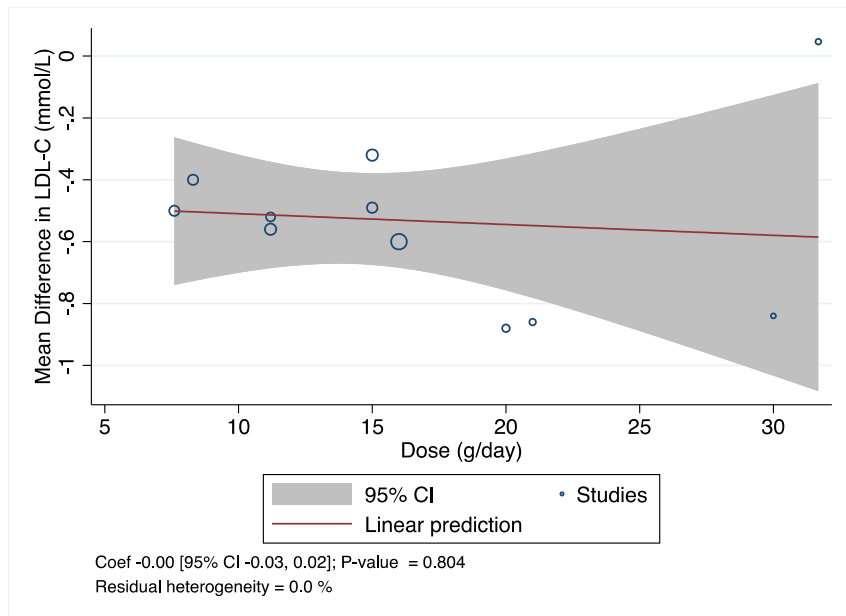


Fig S7. Linear and Non-linear Dose Response

Linear and non-linear dose response analysis presented on A. LDL-C, B. non-HDL-C and C. ApoB. The linear dose estimate is represented by the solid red line. The non-linear dose estimate with 95% CI is represented by dotted lines. Individual studies represented by circles, with their weights in the overall analysis represented by the size of the circles. P < 0.05.

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a) Guar Gum



b) Psyllium

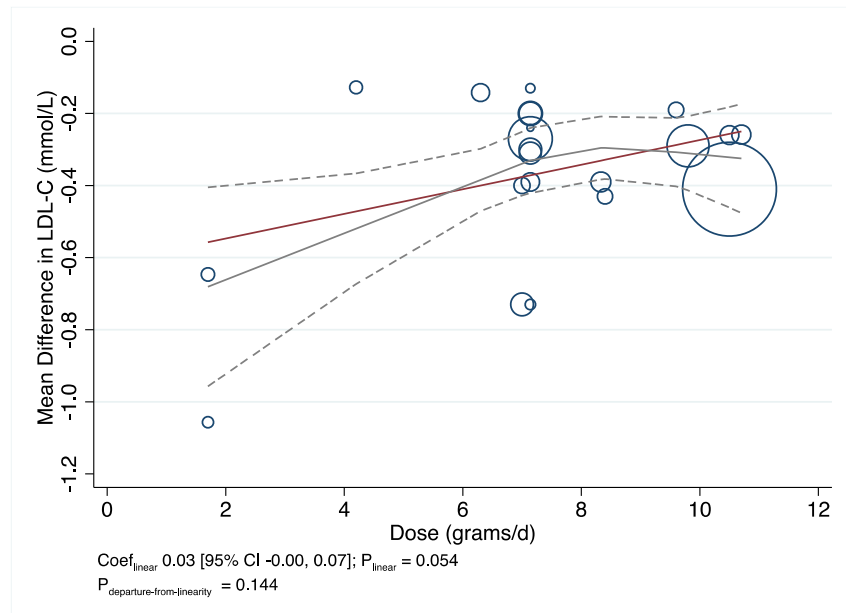
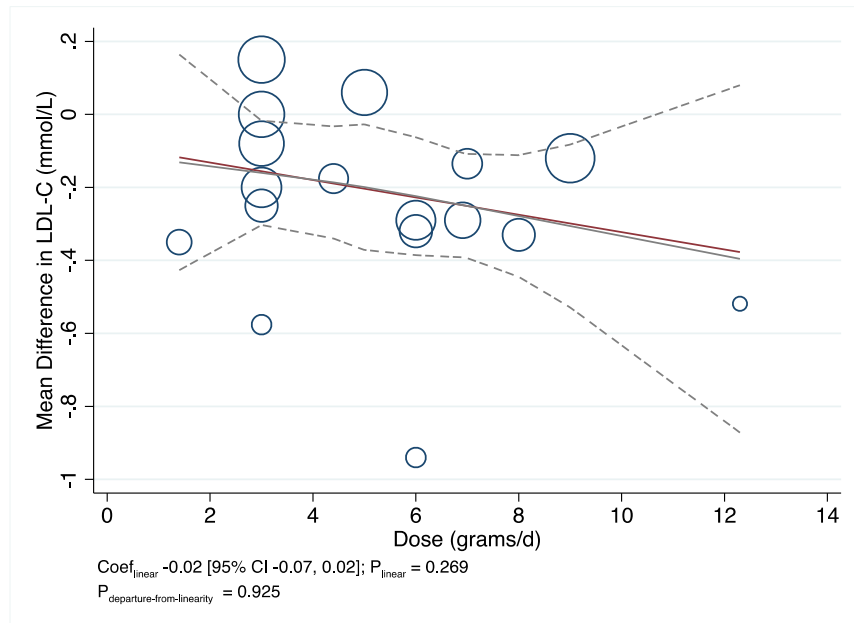


Fig S8. Linear and Non-linear Dose Response for Individual Fiber Type

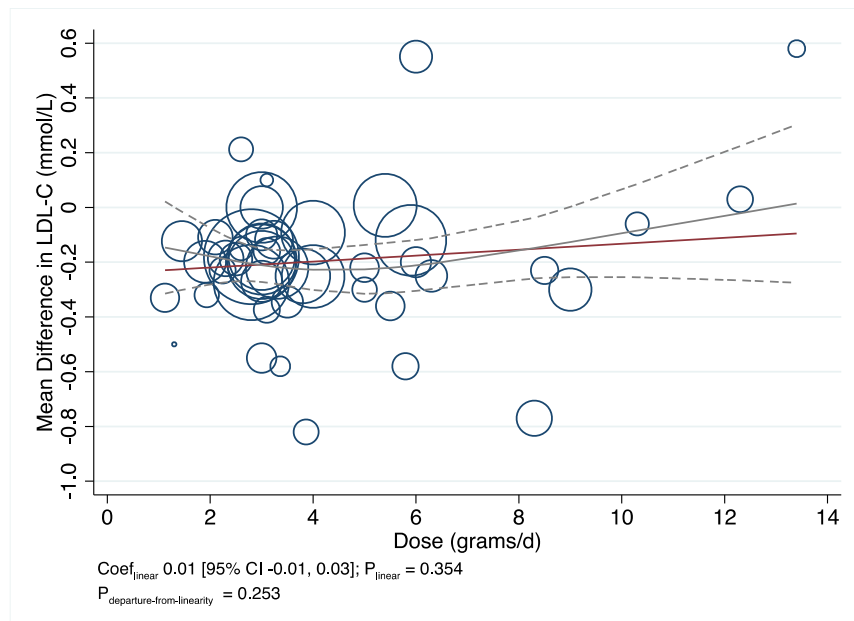
Linear and non-linear dose response analyses presented for increasing viscous dietary fiber dose (g/day) on B. Psyllium, C. Barley β -glucan, and D. Oat β -glucan. The linear dose estimate is represented by the solid red line. The non-linear dose estimate with 95% CI is represented by dotted lines. Only linear dose response estimate is presented for A. Guar Gum, due to insufficient sample size to conduct non-linear dose estimate. Individual studies represented by circles, with their weights in the overall analysis represented by the size of the circles. $P < 0.05$. Linear dose response analysis was not conducted for Konjac due to insufficient sample size.

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c) Barley β -glucan

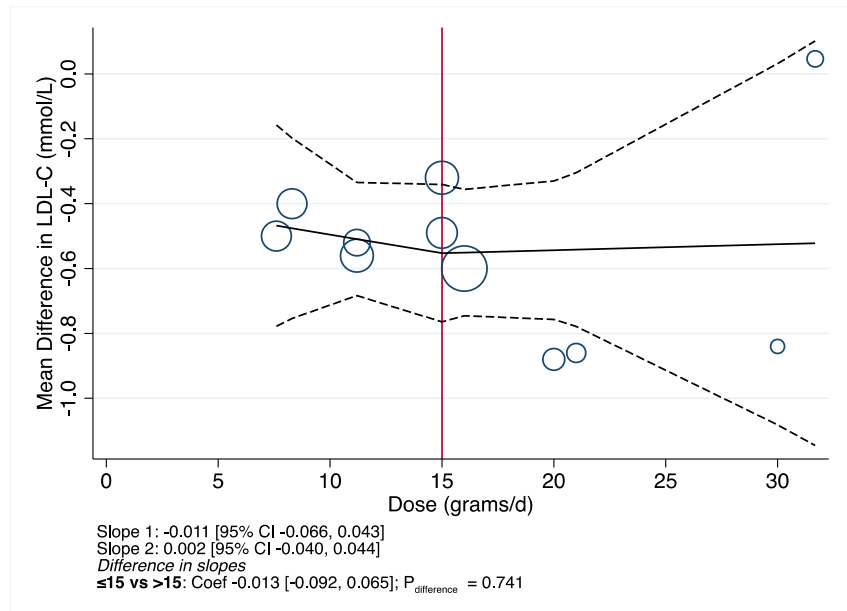


d) Oat β -glucan



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a) Guar (15.0g/day)



b) Psyllium (7.1g/day)

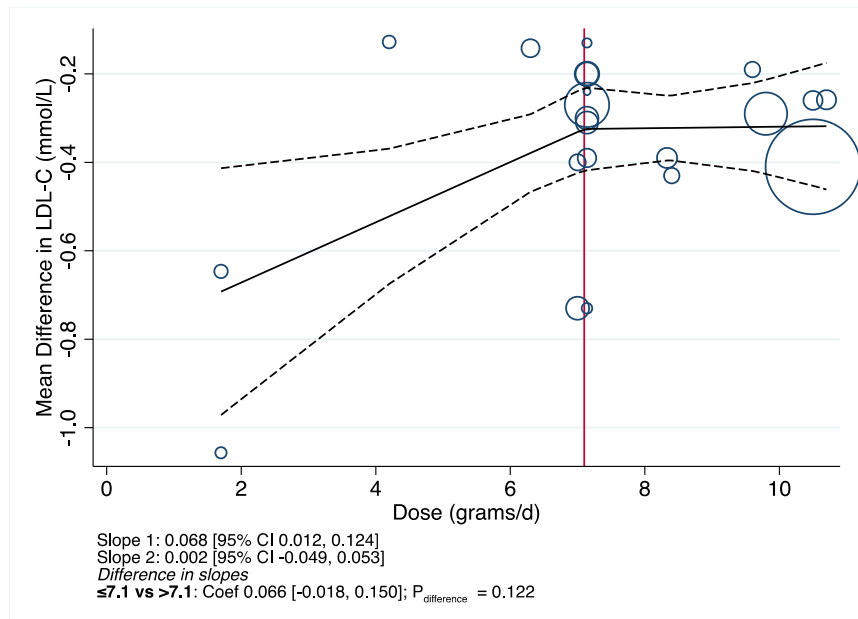
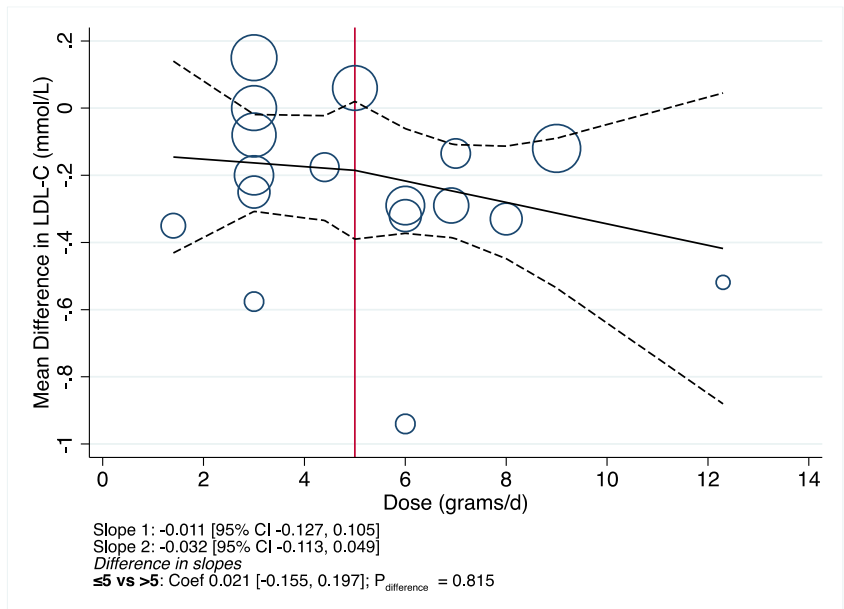


Fig S9. Non-linear Dose Response at a Median Threshold on LDL-C

Median doses for A. Guar Gum (15.0g/day), and B. Psyllium (7.1g/day), C. Barley β -glucan (5.0g/day), and D. Oat β -glucan (3.1g/day) were used as threshold values. The dotted lines represent the 95% confidence interval. $P < 0.05$.

Are all fibers created equal with respect to lipid lowering? Comparing the effect of viscous dietary fiber to non-viscous fiber from cereal sources: A systematic review and meta-analysis of randomized controlled trials. Jovanovski (2022). Supplementary Information.

c) Barley β -glucan (5.0g/day)



d) Oat β -glucan (3.1g/day)

