

Table S1. Search strategy and keywords used to identify relevant papers.

Number	Criteria and keywords used for the search
1	Boolean logic such as "AND", "OR", "NOT" were used
2	Efficacy of millets on lipid profile.
3	Impact of consuming millets on lipid profile
4	Efficacy of millets on total cholesterol level in human. Replaced the word "total cholesterol" with triacylglycerol, triglyceride, LDL-C, VLDL-C, HDL-C

Table S2. Study characteristics of the eligible studies used in the meta-analysis

S.No	Author	Type of millet	Test meal/amount consumed (g/ml)	Parameter studied	Sample size, intervention/control	Age group (yrs)	Study design and duration
1	Kumari et al., 2020	Finger millet	Porridge/not mentioned	Total cholesterol	18/18	45.6 ± 5.6	Randomised cross over study conducted by feeding finger millet porridge to intervention group for 8 weeks. Control group was consuming regular diet.
2	Ugare et al., 2014	Banyard millet	Porridge/78g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C	9/9, 6/6	37 to 40 yrs	breakfast, lunch and dinner was provided with barnyard millet upma or rice form for 28 days.
3	Geetha et al., 2019	Mixed millet	Dumpling/not mentioned	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C, BMI, Weight	30/30	Not indicated	Randomised feeding intervention were millet dumpling was given for lunch to intervention group for 120 days. Control group were consuming regular diet.
4	Anusha et al., 2018	Foxtail millet	Meal/65g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C	12/12	20 to 50 yrs	quinoa was given for a month and then after a washout period of 15 days foxtail millet diet was given for 30days in place of rice.
5	Tiwari and Srivastava, 2017	Finger millet	Bun/200g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C	15/15	40 to 50 yrs	Low GI finger millet bun was fed to intervention group for 60 days. documented
6	Thathola et al., 2010	Foxtail millet	Biscuit and Burfi/100g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C	10/10	36 to 78 yrs	Case-control clinical trial followed by cross over clinical trial conducted for 30 days by feeding biscuit and 30days by feeding burfi.

7	Anushia et al., 2019	Millet	Meal/not mentioned	Total cholesterol, triglyceride, LDL-C, BMI	44/44	30 to 50 yrs	Randomised trial in which the intervention group received counselling to include millet in daily diet (n=44) and was monitored through telephone for 3 months. Control group were consuming regular diet (n=44).
8	Itagi et al., 2012	Foxtail millet	Meal/80g	Total cholesterol, triglyceride, HDL-C	9/6	>40 yrs	Low GI foxtail millet diabetic mix was fed to the intervention group for 4 weeks.
9	Joshi and Srivastava, 2019	Banyard millet	Cooked by boiling with water (similar to rice)/100g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C	15/15	24-26	Banyard millet was fed to diabetic subjects for 3 months and control group was consuming their regular diet.
10	Anunciacao et al., 2019	Sorghum	breakfast cereal and drink made of extruded sorghum/40g	Weight, BMI	24/24	18-40	Randomised controlled trial to test sorghum meal against wheat meal for its benefit in reducing body fat in overweight men was conducted for 8 weeks.
11	Sobhana et al., 2020	Mixed millet	Roti/90g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C, weight, BMI, systolic blood pressure and diastolic blood pressure	47/47	51.72 ± 1.09	Millet-based roti was fed to intervention group (n=47) for 90 days and control group (n=47) was consuming regular diet.
12	Surekha et al., 2013	Banyard millet	Health food/88g	Total cholesterol, triglyceride, LDL-C, VLDL-C, HDL-C, weight, TC:HDL ratio, LDL:HDL ratio	7/6	25-45 yrs	Millet-based health food was provided as a meal for 28days and control group was consuming regular diet.

Table S3. Changes in blood lipid profile and BMI

Blood lipid profile and BMI	Treatment group		Control group	
	% change	<i>p</i> (Wilcoxon matched-pairs signed-ranks test)	% change	<i>p</i> (Wilcoxon matched-pairs signed-ranks test)
Total cholesterol	-6.6	0.011	+0.8	0.311
Triacylglycerol	-8.2	0.002	+1.6	0.480
LDL-C	-11.7	0.003	+1.4	1.000
VLDL-C	-7.9	0.003	+5.9	1.000
HDL-C	+6.1	0.010	-4.6	0.004
BMI	-2.5	0.068	+0.1	0.715

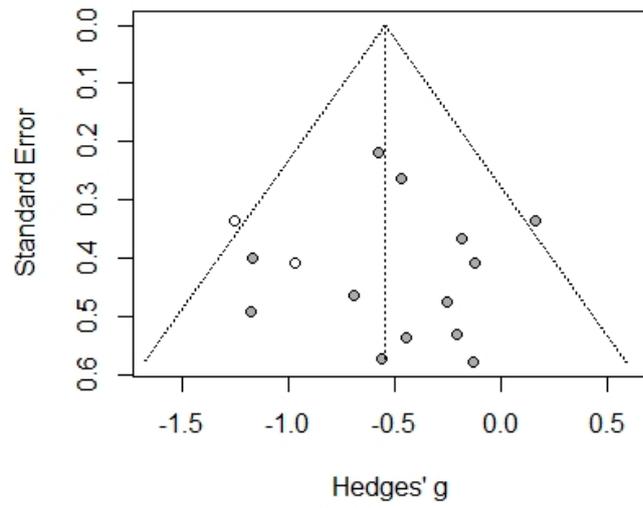


Figure S1: Total cholesterol funnel plot

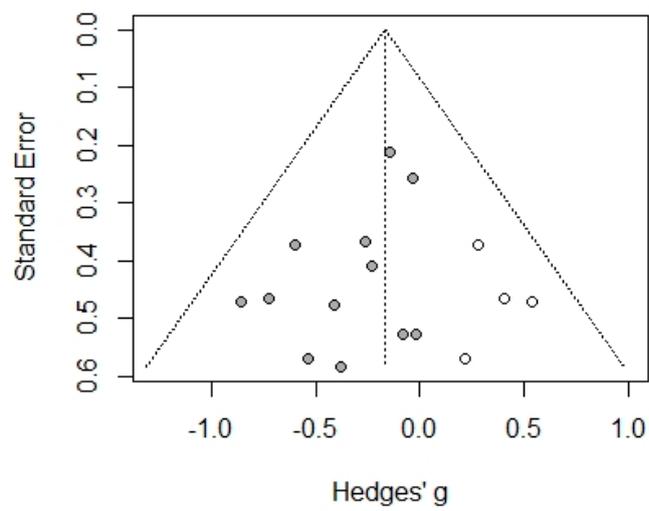


Figure S2: Triacylglycerol funnel plot

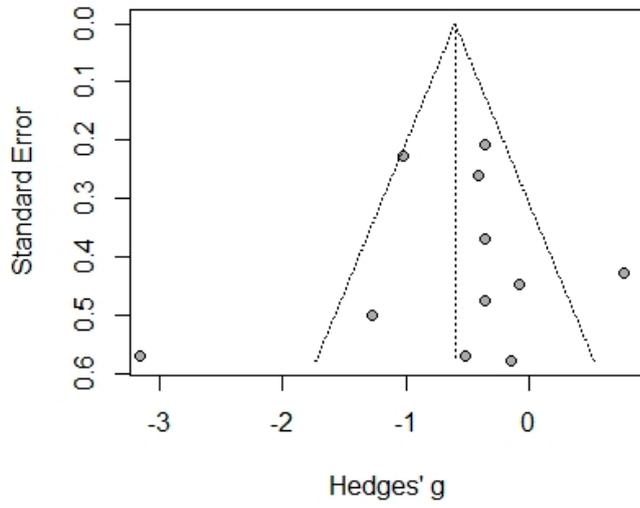


Figure S3: LDL-C funnel plot

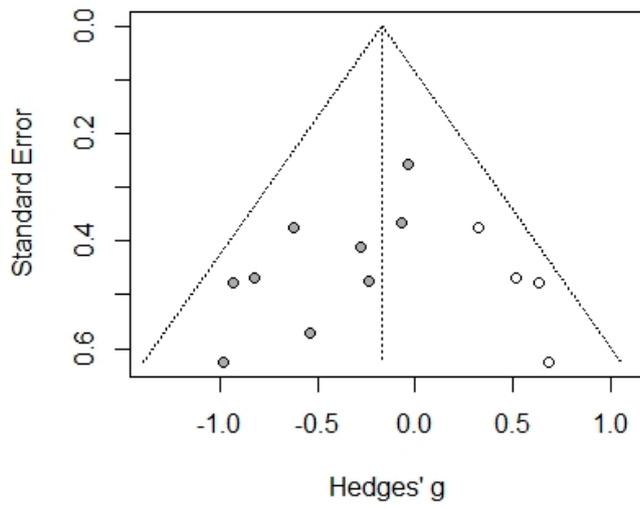


Figure S4: VLDL-C funnel plot

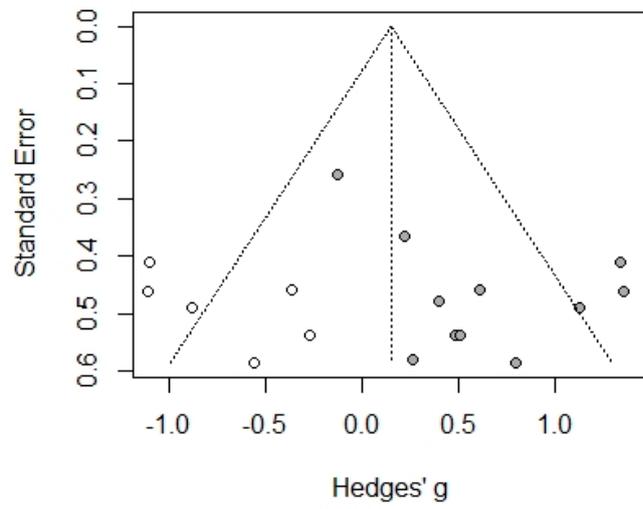


Figure S5: HDL-C funnel plot

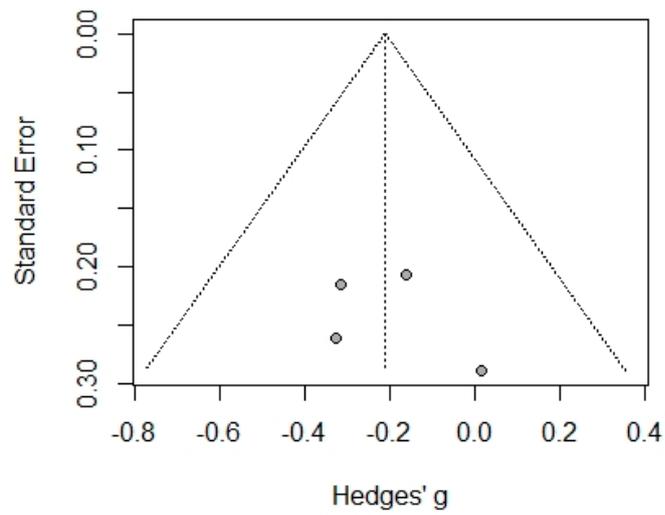


Figure S6: BMI funnel plot