

Table 2: The effect of macronutrient substitutions of blood lipid levels as reported by Mensink 2016 [1]

Study	Design	n	Follow-up time	Outcome	Substitution	Result	Effect size	Covariates included in analyses
Substitution of saturated fat for MUFA								
Mensink 2016 [1]	Systematic review and meta-analysis of randomized controlled trials	74 studies	Range 13-91 days	Total cholesterol	1% of energy from SFA → cis-MUFA	-0.046 mmol/L (-0.051 to -0.040; p<0.001)	↓	No adjustment
		69 studies		LDL cholesterol		-0.042 mmol/L (-0.047 to -0.037; p<0.001)	↓	
		68 studies		HDL cholesterol		-0.002 mmol/L (-0.00 to 0.000; p=0.014))	↓	
		72 studies		Triglycerides		-0.004 mmol/L (-0.007 to -0.001; p=0.022)	↓	
Substitution of saturated fat for PUFA								
Mensink 2016 [1]	Systematic review and meta-analysis of randomized controlled trials	74 studies	Range 13-91 days	Total cholesterol	1% of energy from SFA → cis-PUFA	-0.064 mmol/L (-0.070 to -0.058; p<0.001)	↓	No adjustment
		69 studies		LDL cholesterol		-0.055 mmol/L (-0.061 to -0.050; p<0.001)	↓	
		68 studies		HDL cholesterol		-0.005 mmol/L (-0.006 to -0.003; p<0.001)	↓	

		72 studies		Triglycerides		-0.010 mmol/L (-0.014 to -0.007; p<0.001)	↓	
Substitution of saturated fat for carbohydrate								
Mensink 2016 [1]	Systematic review and meta-analysis of randomized controlled trials	74 studies	Range 13-91 days	Total cholesterol	1% of energy from SFA → carbohydrates	-0.041 mmol/L (-0.047 to -0.035; p<0.001)	↓	No adjustment
		69 studies		LDL cholesterol		-0.033 mmol/L (-0.039 to -0.027; p<0.001)	↓	
		68 studies		HDL cholesterol		-0.010 mmol/L (-0.012 to -0.008; p<0.001)	↓	
		72 studies		Triglycerides		0.011 mmol/L (0.007 to 0.014; p=0.842)	↔	

References

1. Mensink, R. *Effects of saturated fatty acids on serum lipids and lipoproteins: a systematic review and regression analysis*; World Health Organization: Geneva, 2016.