

The association between macronutrient intake and the metabolic syndrome and its components in type 1 diabetes

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Supplementary Table 1. Association between dietary fatty acid intake (substitution model) and the metabolic syndrome and its individual components (as dichotomous variables)

		MetS	Waist	TG	HDL	BP
SAFA (MUFA)	M	1.547 (0.381–6.293)	1.964 (0.488–7.909)	1.296 (0.329–5.112)	1.298 (0.318–5.303)	0.581 (0.072–4.706)
	W	1.341 (0.505–3.564)	1.763 (0.678–4.584)	2.088 (0.697–6.256)	1.417 (0.522–3.841)	1.265 (0.453–3.535)
SAFA (PUFA)	M	0.870 (0.312–2.429)	1.834 (0.656–5.129)	0.780 (0.284–2.142)	0.688 (0.243–1.948)	0.402 (0.085–1.904)
	W	1.089 (0.547–2.170)	1.079 (0.546–2.131)	1.406 (0.324–5.869)	1.903 (0.857–3.792)	0.814 (0.388–1.707)
MUFA (PUFA)	M	0.928 (0.155–5.577)	1.155 (0.191–6.991)	1.398 (0.232–8.425)	2.003 (0.315–12.732)	0.358 (0.028–4.539)
	W	2.048 (0.553–7.579)	1.587 (0.436–5.775)	1.378 (0.324–5.869)	2.185 (0.542–8.812)	0.493 (0.125–1.948)

MetS, metabolic syndrome; Waist, waist component of the metabolic syndrome; TG, triglyceride component of the metabolic syndrome; HDL, high-density lipoprotein cholesterol component of the metabolic syndrome; BP, blood pressure component of the metabolic syndrome; SAFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; M, men; W, women. Logistic regression analyses. All models are adjusted for age, smoking, and physical activity. Data are presented as odds ratio (95% confidence interval). In each model, a given macronutrient is included as an independent variable and one of the macronutrients (in the parentheses) is excluded from the model. The remaining macronutrients and total energy intake are included as covariates. The odds ratios represent the increase or decrease in the risk of having the metabolic syndrome or one of its individual components when increasing the intake of the independent macronutrient by 5% of total energy, while simultaneously reducing an isoenergetic amount of the excluded macronutrient.

Supplementary Table 2. Association between dietary fatty acid intake (substitution model) and the components of the metabolic syndrome (as continuous variables)

		Waist circumference	TG concentration	HDL concentration	SBP	DBP
SAFA (MUFA)	M	2.677 (-3.521–8.876)	0.159 (-0.198–0.516)	-0.078 (-0.303–0.147)	-3.621 (-12.365–5.123)	-2.152 (-8.196–3.892)
	W	1.275 (-3.192–5.741)	0.184 (-0.143–0.511)	0.115 (-0.056–0.287)	-0.127 (-6.615–6.362)	1.044 (-3.066–5.154)
SAFA (PUFA)	M	3.042 (-1.519–7.603)	0.165 (-0.099–0.429)	-0.100 (-0.267– 0.066)	-1.982 (-8.436–4.473)	-1.652 (-6.111–2.808)
	W	2.550 (-0.657–5.757)	0.011 (-0.225–0.247)	-0.088 (-0.212–0.036)	-0.882 (-5.545–3.781)	0.724 (-2.229–3.677)
MUFA (PUFA)	M	4.199 (-3.846–12.245)	0.112 (-0.358–0.582)	-0.049 (-0.345–0.248)	-1.453 (-12.832–9.926)	-0.515 (-8.377–7.346)
	W	3.329 (-2.755–9.414)	-0.081 (-0.526–0.364)	-0.171 (-0.406–0.063)	0.948 (-7.851–9.748)	-0.545 (-6.118–5.027)

TG, triglyceride; HDL, high-density lipoprotein cholesterol; SBP, systolic blood pressure; DBP, diastolic blood pressure; SAFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; M, men; W, women. Generalized linear model. All models are adjusted for age, smoking, and physical activity. Analyses with lipid variables are additionally adjusted for lipid lowering medication, and analyses with blood pressure variables are adjusted for antihypertensive medication. Data are presented as B (95% Wald Confidence Interval). In each model, a given macronutrient is included as an independent variable and one of the macronutrients (in the parentheses) is excluded from the model. The remaining macronutrients and total energy intake are included as covariates. The B represents the increase or decrease in the continuous outcome variable when increasing the intake of the independent macronutrient by 5% of total energy, while simultaneously reducing an isoenergetic amount of the excluded macronutrient.

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