

Table S1. Nutrient analysis and fatty acid composition of the different types of breakfast (based on the manufacturer's information).

	MARGARINE	BUTTER	VIRGIN OLIVE OIL
Energy (Kcal)	445,84	448,84	479,84
Carbohydrates (g)	54,61	54,53	54,43
Proteins (g)	16,34	16,30	16,16
Dietary fiber	6,35	6,35	6,36
Fatty acid composition			
SFA	22.09	66.46	15.65
Butyric acid (4:0)	-	3.95	-
Caproic acid (6:0)	-	2.47	-
Caprylic acid (8:0)		1.49	-
Capric acid (10:0)	0.17	3.09	-
Lauric acid (12:0)	2.84	3.21	-
Myristic acid (14:0)	1.00	9.14	-
Palmitic acid (16:0)	10.75	29.79	15.55
Stearic acid (18:0)	7.33	13.32	0.10
MUFA	26.75	27.93	72.72
Palmitoleic acid (16:1n-9)	-	1.86	-
Oleic acid (18:1n-9)	26.75	26.07	72.72
PUFA	50.17	4.71	11.11
Linoleic acid(18:2n-6)	49.17	4.34	10.20
α -linolenic acid (18:3n-3)	1.00	0.37	0.91
Cholesterol (mg)	-	215	-

Fatty acids data represents % fatty acids excepting cholesterol, which indicates mg/100g food. SFA: saturated fatty acids; MUFA: monounsaturated fatty acids; PUFA: polyunsaturated fatty acids.

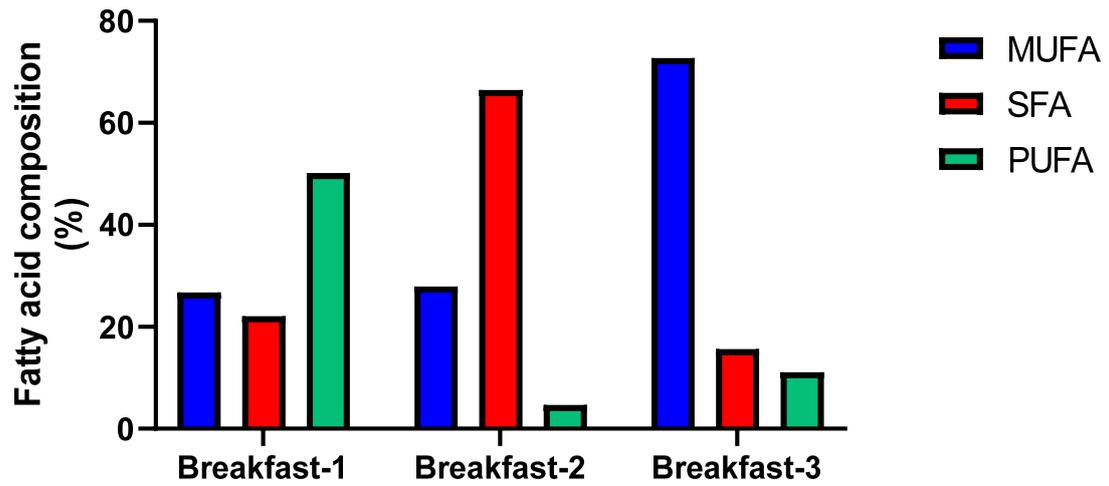
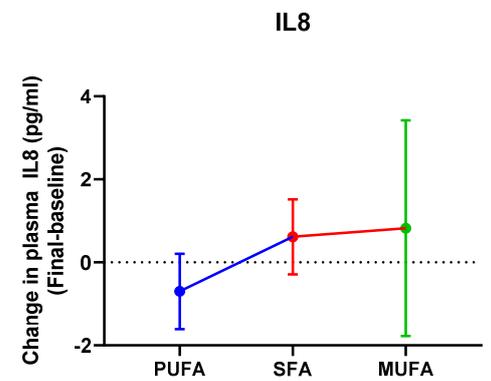
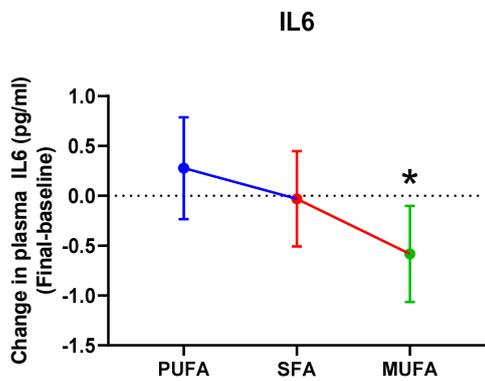
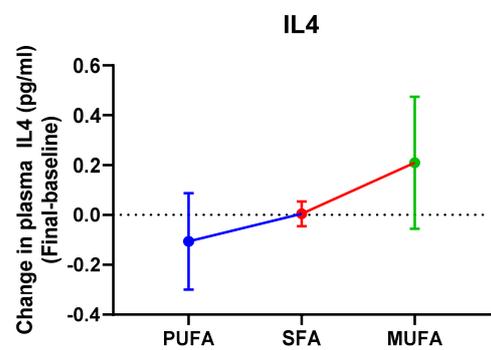
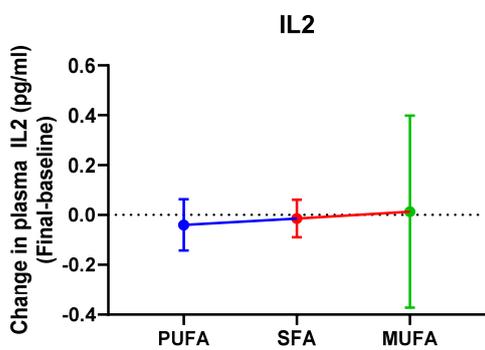
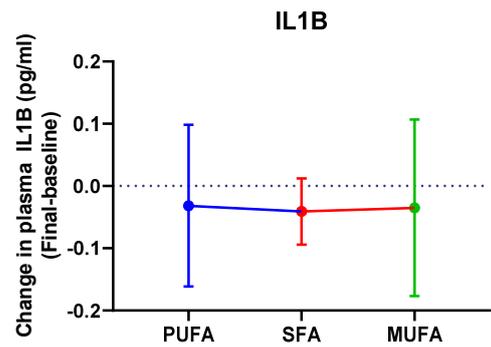
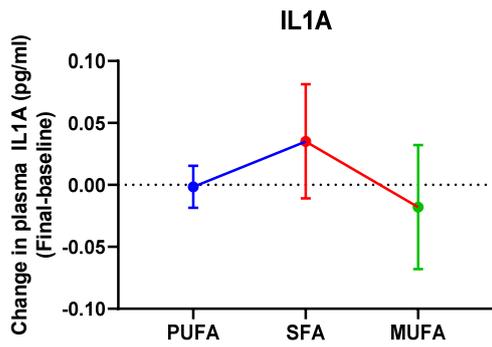


Figure S1. Fatty acid composition (in fat grams per serving) of the different interventions (based on the manufacturer's information). Breakfast-1 was mainly composed by PUFA, breakfast-2 by SFA and breakfast-3 by MUFA (the figure has been described elsewhere [1]).



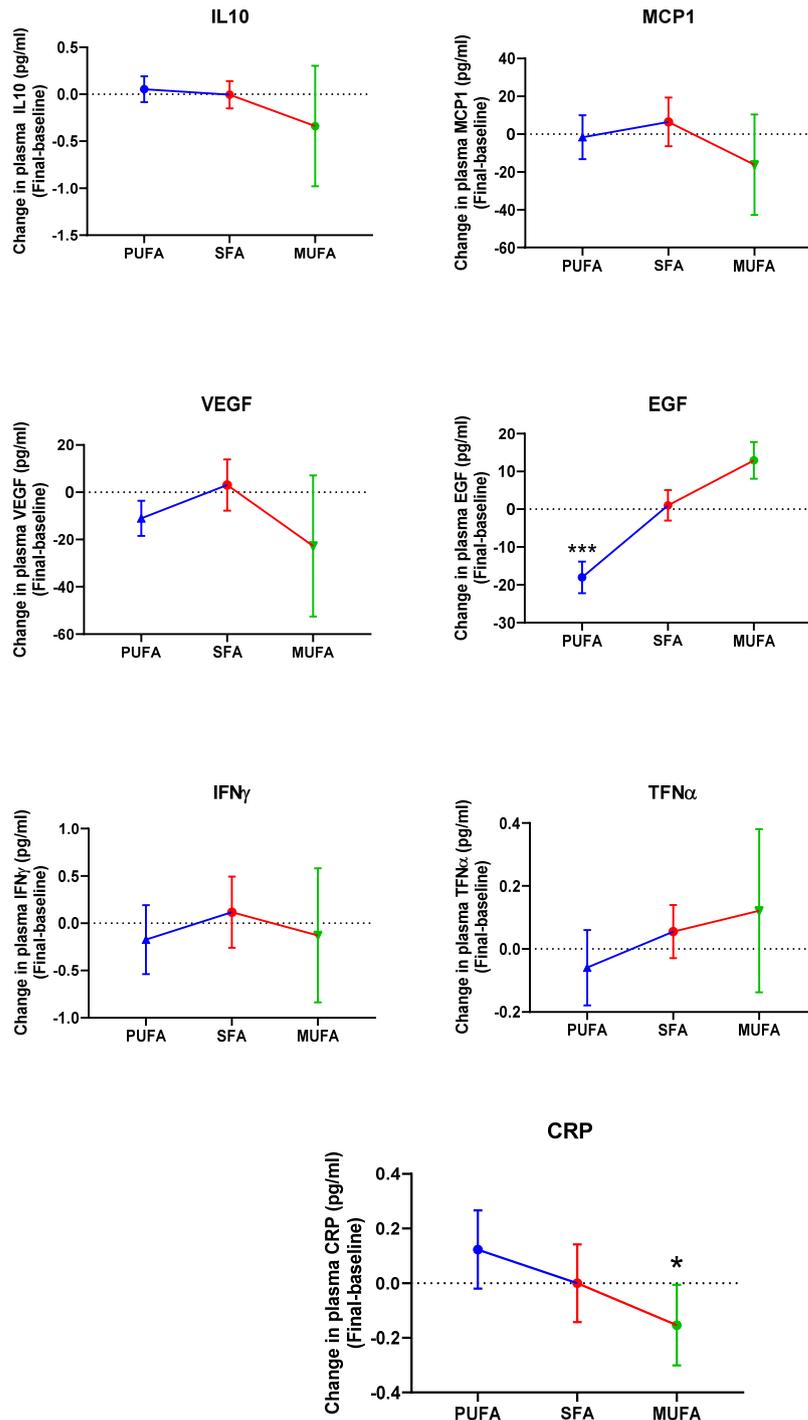


Figure S2. Estimated treatment differences (final – baseline) in all the inflammatory markers analysed in the present study. Data derived from those women who completed the study (n=51). Repeated-measures ANCOVA was employed to evaluate possible statistical differences. Baseline age, BMI and intervention order were used as covariates. PUFA represents margarine-based breakfast. SFA represents butter-based breakfast. MUFA represents extra virgin olive oil (VOO) breakfast. *Statistically significant differences between VOO-breakfast and margarine breakfast ($p=0.025$). *** Statistically significant differences between margarine and VOO breakfasts ($p<0.001$).

REFERENCES

1. Delgado-Alarcón, J.M.; Morante, J.J.H.; Aviles, F. V.; Albaladejo-Otón, M.D.; Morillas-Ruíz, J.M. Effect of the Fat Eaten at Breakfast on Lipid Metabolism: A Crossover Trial in Women with Cardiovascular Risk. *Nutrients* **2020**, *12*, 1–13, doi:10.3390/nu12061695.