

Supplementary Materials: Associations Between Fatty Acid Intake and Status, Desaturase Activities, and FADS Gene Polymorphism in Centrally Obese Postmenopausal Polish Women

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Table S1. Distribution of erythrocyte fatty acids by median total SFA intake.

Concentrations of FA in RBC (µg/mL)	Low SFA Group ^a	High SFA Group ^a	<i>p</i> -Value
14:0	11.01 ± 10.66	12.63 ± 12.09	0.348
15:0	11.88 ± 5.40	12.36 ± 5.31	0.630
16:0	422.73 ± 158.05	451.82 ± 182.46	0.276
17:0	12.55 ± 7.58	16.20 ± 12.24	0.034
18:0	272.65 ± 58.58	276.28 ± 59.46	0.729
22:0	6.64 ± 3.82	6.24 ± 3.37	0.401
14:1 <i>n</i> -9	4.62 ± 2.48	5.26 ± 2.84	0.215
14:1 <i>n</i> -5	2.40 ± 1.96	2.75 ± 2.54	0.377
15:1	28.76 ± 11.01	26.63 ± 8.89	0.156
16:1 <i>n</i> -7	19.21 ± 20.17	25.51 ± 26.03	0.094
17:1	35.69 ± 19.68	30.72 ± 16.56	0.078
18:1 <i>n</i> -9 <i>t</i>	2.65 ± 1.75	2.67 ± 1.79	0.993
18:1 <i>n</i> -7 <i>t</i>	4.42 ± 3.05	4.81 ± 2.52	0.433
18:1 <i>n</i> -9 <i>c</i>	359.67 ± 162.82	398.38 ± 210.52	0.172
18:1 <i>n</i> -7 <i>c</i>	28.75 ± 12.64	32.28 ± 14.65	0.127
18:1 <i>n</i> -5 <i>c</i>	3.91 ± 3.38	4.78 ± 3.76	0.195
20:1 <i>n</i> -9	7.31 ± 2.98	7.10 ± 2.51	0.628
22:1 <i>n</i> -9	12.48 ± 9.85	10.85 ± 6.76	0.303
24:1 <i>n</i> -9	14.93 ± 12.83	15.30 ± 10.89	0.982
18:2 <i>n</i> -6 <i>t</i>	8.15 ± 4.59	9.93 ± 4.61	0.028
18:2 <i>n</i> -6	266.97 ± 167.56	324.32 ± 213.85	0.070
18:3 <i>n</i> -6	4.99 ± 3.92	6.23 ± 5.12	0.104
20:2 <i>n</i> -6	5.86 ± 10.23	4.04 ± 6.87	0.260
20:3 <i>n</i> -6	31.21 ± 11.34	33.15 ± 11.04	0.297
20:4 <i>n</i> -6	280.97 ± 57.36	281.22 ± 57.46	0.895
22:2 <i>n</i> -6	2.87 ± 1.63	3.05 ± 1.63	0.456
22:4 <i>n</i> -6	48.06 ± 11.86	44.19 ± 11.83	0.045
22:5 <i>n</i> -6	11.10 ± 3.70	10.40 ± 3.09	0.163
18:3 <i>n</i> -3 <i>t</i>	2.49 ± 2.82	2.46 ± 2.49	0.921
18:3 <i>n</i> -3	13.11 ± 8.80	14.23 ± 8.71	0.535
20:3 <i>n</i> -3	10.21 ± 9.00	10.92 ± 9.13	0.726
20:5 <i>n</i> -3	26.08 ± 12.90	27.11 ± 12.52	0.693
22:5 <i>n</i> -3	130.29 ± 54.96	140.49 ± 52.57	0.252
22:6 <i>n</i> -3	103.33 ± 30.89	99.17 ± 25.03	0.359
20:3 <i>n</i> -9	5.60 ± 2.69	5.55 ± 2.21	0.976

Values are means ± SD for fatty acids levels. ^aLow and high intakes determined by median SFA, which was 10.48% of energy intake. The model was adjusted for BMI, physical activity, and hypolipidemic and hypoglycemic medications. Abbreviations: SFA: saturated fatty acids; MUFA: monounsaturated fatty acids; *n*-3 PUFA: *n*-3 polyunsaturated fatty acids; *n*-6 PUFA: *n*-6 polyunsaturated fatty acids; RBC: red blood cells.

Table S2. Distribution of erythrocyte fatty acids by median of total MUFA intake.

Concentrations of FA in RBC ($\mu\text{g/mL}$)	Low MUFA ^a	High MUFA ^a	<i>p</i> -Value
14:0	12.07 \pm 11.43	11.52 \pm 11.38	0.586
15:0	12.33 \pm 5.77	11.89 \pm 4.88	0.441
16:0	439.38 \pm 168.35	434.37 \pm 173.75	0.631
17:0	14.01 \pm 10.78	14.66 \pm 9.74	0.965
18:0	275.78 \pm 59.98	272.99 \pm 58.00	0.500
22:0	6.85 \pm 3.55	6.02 \pm 3.62	0.256
14:1 <i>n</i> -9	5.16 \pm 2.91	4.70 \pm 2.39	0.240
14:1 <i>n</i> -5	2.35 \pm 1.97	2.80 \pm 2.52	0.450
15:1	28.19 \pm 11.20	27.22 \pm 8.74	0.619
16:1 <i>n</i> -7	21.83 \pm 22.11	22.76 \pm 24.73	0.966
17:1	34.73 \pm 19.92	31.73 \pm 16.50	0.484
18:1 <i>n</i> -9 <i>t</i>	2.71 \pm 1.68	2.60 \pm 1.85	0.722
18:1 <i>n</i> -7 <i>t</i>	4.45 \pm 2.82	4.77 \pm 2.79	0.635
18:1 <i>n</i> -9 <i>c</i>	383.63 \pm 180.86	373.26 \pm 196.32	0.644
18:1 <i>n</i> -7 <i>c</i>	30.19 \pm 13.46	30.77 \pm 14.08	1.000
18:1 <i>n</i> -5 <i>c</i>	4.28 \pm 3.47	4.39 \pm 3.72	0.938
20:1 <i>n</i> -9	7.35 \pm 2.79	7.06 \pm 2.72	0.403
22:1 <i>n</i> -9	12.44 \pm 8.92	10.89 \pm 8.01	0.454
24:1 <i>n</i> -9	15.45 \pm 12.97	14.76 \pm 10.71	0.741
18:2 <i>n</i> -6 <i>t</i>	8.58 \pm 4.71	9.49 \pm 4.62	0.357
18:2 <i>n</i> -6	291.40 \pm 191.76	298.71 \pm 195.68	0.927
18:3 <i>n</i> -6	5.29 \pm 4.11	5.91 \pm 5.02	0.478
20:2 <i>n</i> -6	4.73 \pm 8.70	5.23 \pm 8.90	0.718
20:3 <i>n</i> -6	32.89 \pm 11.53	31.39 \pm 10.86	0.255
20:4 <i>n</i> -6	281.41 \pm 55.17	280.76 \pm 59.67	0.486
22:2 <i>n</i> -6	3.03 \pm 1.79	2.88 \pm 1.44	0.590
22:4 <i>n</i> -6	47.60 \pm 12.11	44.67 \pm 11.72	0.098
22:5 <i>n</i> -6	11.36 \pm 3.37	10.13 \pm 3.38	0.014
18:3 <i>n</i> -3 <i>t</i>	2.48 \pm 2.89	2.47 \pm 2.40	0.917
18:3 <i>n</i> -3	13.82 \pm 9.04	13.49 \pm 8.49	0.600
20:3 <i>n</i> -3	10.94 \pm 9.31	10.16 \pm 8.80	0.529
20:5 <i>n</i> -3	25.72 \pm 11.15	27.49 \pm 14.14	0.635
22:5 <i>n</i> -3	134.01 \pm 55.10	136.59 \pm 52.90	0.957
22:6 <i>n</i> -3	100.69 \pm 29.53	101.93 \pm 26.85	0.945
20:3 <i>n</i> -9	5.45 \pm 2.01	5.71 \pm 2.86	0.499

Values are means \pm SDs for fatty acids levels. ^aLow and high intakes determined by median MUFA, which was 10.74% of energy intake. Median total energy from MUFA intake per day was 10.74%. The model was adjusted for BMI, physical activity, and hypolipidemic and hypoglycemic medications. Abbreviations: SFA: saturated fatty acids; MUFA: monounsaturated fatty acids; *n*-3 PUFA: *n*-3 polyunsaturated fatty acids; *n*-6 PUFA: *n*-6 polyunsaturated fatty acids; RBC: red blood cells.

Table S3. Distribution of erythrocyte fatty acids by median total PUFA intake.

Concentrations of FA in RBC ($\mu\text{g/mL}$)	Low PUFA ^a	High PUFA ^a	<i>p</i> -Value
14:0	10.98 \pm 10.25	12.61 \pm 12.39	0.461
15:0	12.12 \pm 5.62	12.12 \pm 5.09	0.939
16:0	428.03 \pm 157.50	445.70 \pm 182.94	0.602
17:0	13.68 \pm 10.89	14.96 \pm 9.61	0.468
18:0	271.92 \pm 58.20	276.88 \pm 59.74	0.702
22:0	6.40 \pm 3.38	6.49 \pm 3.83	0.878
14:1n-9	4.93 \pm 2.82	4.93 \pm 2.53	0.875
14:1n-5	2.67 \pm 2.23	2.47 \pm 2.31	0.548
15:1	27.28 \pm 10.98	28.15 \pm 9.11	0.638
16:1n-7	20.23 \pm 20.31	24.31 \pm 25.98	0.346
17:1	32.97 \pm 18.42	33.55 \pm 18.37	0.840
18:1n-9t	2.52 \pm 1.66	2.79 \pm 1.86	0.410
18:1n-7t	4.45 \pm 2.85	4.76 \pm 2.76	0.544
18:1n-9c	370.19 \pm 176.51	386.81 \pm 199.50	0.604
18:1n-7c	28.80 \pm 12.27	32.12 \pm 14.91	0.179
18:1n-5c	4.16 \pm 3.55	4.50 \pm 3.63	0.672
20:1n-9	7.05 \pm 2.62	7.36 \pm 2.89	0.516
22:1n-9	12.10 \pm 9.39	11.27 \pm 7.55	0.644
24:1n-9	15.24 \pm 13.28	14.98 \pm 10.42	0.877
18:2n-6t	8.28 \pm 4.56	9.75 \pm 4.70	0.092
18:2n-6	279.67 \pm 185.88	310.02 \pm 199.97	0.400
18:3n-6	5.21 \pm 4.09	5.97 \pm 5.00	0.353
20:2n-6	4.68 \pm 8.72	5.26 \pm 8.87	0.683
20:3n-6	32.11 \pm 11.50	32.20 \pm 10.98	0.925
20:4n-6	275.82 \pm 56.41	286.28 \pm 57.91	0.378
22:2n-6	2.93 \pm 1.67	2.98 \pm 1.59	0.871
22:4n-6	47.61 \pm 12.75	44.76 \pm 11.05	0.151
22:5n-6	10.92 \pm 3.24	10.60 \pm 3.61	0.511
18:3n-3t	2.16 \pm 1.46	2.79 \pm 3.43	0.193
18:3n-3	12.45 \pm 7.43	14.85 \pm 9.78	0.123
20:3n-3	10.68 \pm 9.54	10.43 \pm 8.58	0.862
20:5n-3	24.59 \pm 8.87	28.55 \pm 15.36	0.079
22:5n-3	135.33 \pm 56.22	135.21 \pm 51.84	0.949
22:6n-3	100.04 \pm 28.05	102.53 \pm 28.41	0.630
20:3n-9	5.46 \pm 2.19	5.69 \pm 2.70	0.530

Values are means \pm SD for fatty acids levels. ^aLow and high intakes determined by median PUFA, which was 3.66% of energy intake. The model was adjusted for BMI, physical activity, and hypolipidemic and hypoglycemic medications. Abbreviations: SFA: saturated fatty acids; MUFA: monounsaturated fatty acids; *n*-3 PUFA: *n*-3 polyunsaturated fatty acids; *n*-6 PUFA: *n*-6 polyunsaturated fatty acids; RBC: red blood cells.