

Table S1 Relation between the fatty acids and haemodynamic parameters measured after the 6MWT

	<i>Post-6MWT SBP</i>	<i>Post-6MWT Z-SBP</i>	<i>Post-6MWT DBP</i>	<i>Post-6MWT Z-DBP</i>	<i>Post-6MWT HR</i>	<i>Post-6MWT RPP</i>	<i>Post-6MWT SatO₂</i>	<i>6MWT distance</i>
<i>C16:1n7 (palmitoleic)</i>	0.168*	0.164*	0.213**	0.177* *	0.101	0.154	-0.149	-0.150*
<i>C16:0</i>	0.201**	0.232**	0.002	0.002	0.044	0.130*	-0.080	0.001
<i>C18:0</i>	-0.154*	-0.163*	-0.010	-0.013	-0.065	0.094	-0.118	0.052
<i>C18:1n9</i>	0.071	0.110	-0.018	0.005	0.011	-0.107	0.043	-0.066
<i>C18:2n6 LA</i>	-0.002	0.004	-0.031	-0.026	0.044	0.063	0.031	-0.062
<i>C18:3n6 GLA</i>	-0.080	-0.066	-0.095	-0.072	-0.042	0.125	-0.073	-0.127
<i>C20:3n6 DGLA</i>	0.072	0.079	-0.061	-0.050	0.082	-0.067	0.096	0.080
<i>C20:4n6 AA</i>	-0.015	-0.052	0.008	-0.015	-0.049	-0.066	-0.048	0.006
<i>C18:3n3 ALA</i>	-0.124	-0.130	-0.096	-0.089	-0.140	0.029	-0.154	0.004
<i>D5D</i>	-0.069	-0.088	0.045	0.032	-0.085	-0.098	0.045	-0.051
<i>D6D</i>	-0.076	-0.062	-0.075	-0.053	-0.036	-0.067	0.120	-0.108
<i>SDC-16</i>	0.137*	0.130*	0.216**	0.177* *	-0.142	0.087	0.139	-0.154*
<i>SDC-18</i>	0.053	0.089	0.008	0.032	-0.170	-0.003	0.082	-0.048

6MWT, 6-minute walk test; AA: arachidonic acid; ALA: Alpha-Linolenic-Acid; DBP: Diastolic Blood Pressure; DGLA: Dihomo-Gamma-Linolenic-Acid; FA: Fatty Acids; GLA: Gamma-Linolenic-Acid; HR: Heart Rate; LA: linoleic acid RPP Rate Pressure Product, SBP: Systolic Blood Pressure; D5D: delta-5 desaturase; D6D: delta-6 desaturase.

Table S2 Relation between food group intake and haemodynamic parameters measured after the 6MWT

	<i>Post-6MWT SBP</i>	<i>Post-6MWT Z-SBP</i>	<i>Post-6MWT DBP</i>	<i>Post-6MWT Z-DBP</i>	<i>Post-6MWT HR</i>	<i>Post-6MWT RPP</i>	<i>Post-6MWT SatO₂</i>	<i>6MWT distance</i>
<i>Cereals</i>	0.008	0.002	-0.079	-0.095	-0.016	-0.009	-0.027	0.003

Fruit	0.230**	0.203**	0.098	0.041	0.073	0.162*	-0.114	0.011
Nuts	0.073	0.061	-0.027	-0.056	0.031	0.057	-0.109	-0.021
Dairy products	-0.015	-0.020	0.009	0.013	0.022	0.012	0.021	-0.001
Meat	0.058	0.047	0.051	0.043	-0.019	0.009	0.037	-0.064
Fish	0.026	0.006	0.016	-0.003	0.027	-0.009	-0.045	0.069
Sweets	0.057	0.043	0.001	-0.016	0.014	0.030	0.064	-0.105
Junk Food	0.137*	0.121*	0.069	0.040	-0.023	0.042	0.029	-0.061

6MWT, 6-minute walk test; DBP: Diastolic Blood Pressure; HR: Heart Rate; RPP Rate Pressure Product, SatO₂: oxygen saturation; SBP: Systolic Blood Pressure

Table S3 Relation between anthropometric traits and the differences between hemodynamic parameters pre and post 6MWT (Delta)

	Delta SBP	Delta DBP	Delta HR	Delta RPP	Delta SatO ₂
BMI	0.132*	0.018	0.186**	0.226**	-0.136
z-BMI	0.117*	-0.010	0.166**	0.199**	-0.025
Waist/height	0.080	-0.038	0.094	0.121	-0.105
Waist/hip	-0.026	-0.069	-0.010	-0.015	-0.125
BSA	0.157**	0.036	0.169**	0.227**	-0.053
FAT, kg	0.153*	0.018	0.181**	0.234**	-0.169
FFM, kg	0.111	0.021	0.135*	0.172**	0.033
FFM/FM	-0.181**	-0.014	-0.117	-0.182**	0.024
TBW	0.119*	0.024	0.114	0.163**	0.038

6MWT, 6-minute walk test; DBP: Diastolic Blood Pressure; HR: Heart Rate; RPP Rate Pressure Product, SatO₂: oxygen saturation; SBP: Systolic Blood Pressure

Table S4 Relation between the dietary pattern, physical activity and the differences between hemodynamic parameters pre and post 6MWT (Delta)

	Delta SBP	Delta DBP	Delta HR	Delta RPP	Delta SatO ₂
Healthy Pattern	0.023	0.060	0.071	0.078	-0.044
Unhealthy Pattern	-0.006	-0.095	-0.033	-0.027	-0.039

<i>Sedentary activity</i>	0.026	-0.025	0.132*	0.106	0.072
<i>Intense physical activity</i>	0.055	-0.042	0.006	0.027	-0.019

6MWT, 6-minute walk test; DBP: Diastolic Blood Pressure; HR: Heart Rate; RPP Rate Pressure Product, SatO₂: oxygen saturation; SBP: Systolic Blood Pressure

Table S5 Relation between the differences between fatty acids and hemodynamic parameters pre and post 6MWT(Delta)

	<i>Delta SBP</i>	<i>Delta DBP</i>	<i>Delta HR</i>	<i>Delta RPP</i>	<i>Delta SatO₂</i>
<i>Omega 6 FA</i>	-0.061	-0.085	-0.012	-0.042	-0.104
<i>Omega 3 FA</i>	0.064	0.110	0.053	0.058	0.060
<i>Omega 9 FA</i>	-0.007	0.014	0.014	0.016	0.184
<i>Saturated FA</i>	0.030	0.018	-0.037	-0.015	-0.039
<i>Trans fatty FA</i>	0.109	0.130*	0.139*	0.163*	0.043
<i>D5</i>	-0.027	-0.014	-0.038	-0.048	-0.169
<i>D6</i>	-0.098	0.004	-0.113	-0.135*	0.167
<i>Glucose</i>	0.045	0.024	-0.026	-0.012	-0.026
<i>Triglycerides</i>	0.131	0.111	0.040	0.103	0.184
<i>Cholesterol</i>	-0.074	-0.075	-0.095	-0.123	-0.095

6MWT, 6-minute walk test; DBP: Diastolic Blood Pressure; HR: Heart Rate; RPP Rate Pressure Product, SatO₂: oxygen saturation; SBP: Systolic Blood Pressure; D5D: delta-5 desaturase; D6D: delta-6 desaturase.

Linear regressions

S 6 Linear Regression between haemodynamic and anthropometric parameters after adjustment for age, sex, and height

Post-6MWT			
	Beta	95%CI	p-value
BMI	0.068	0.037,0.100	<0.001

Waist/Height	1,786	0.274,3.299	0.021
FAT	0.049	0.028,0.070	<0.001
FFM/FM	0.026	-0.006,0.059	0.002
Trans Fatty Acids	0.386	0.026,0.746	0.036
Post-6MWT			
DBP			
BMI	0.049	0.014,0.083	0.006
FAT	0.036	0.013,0.059	0.003
Post-6MWT			
HR			
BMI	0.067	0.033,0,101	<0.001
Waist/Height	1.872	0.450,3.293	0.010
FAT	0.048	0.025,0.071	<0.001
Post-6MWT			
RPP			
BMI	0.084	0.051,0.117	<0.001
Waist/Height	2.120	0.730,3.510	0.003
FAT	0.060	0.038,0.083	<0.001
FFM	0.040	0.006, 0.074	0.023
FFM/FM	-0.045	-0.075,-0.015	0.003
Trans Fatty Acids	0.441	0.048,0.833	0.028

6MWT, 6-minute walk test; DBP: Diastolic Blood Pressure; HR: Heart Rate; RPP Rate Pressure Product, SatO₂: oxygen saturation; SBP: Systolic Blood Pressure