

S2 Table. SNP × dietary fat interactions in relation to eight cardiometabolic traits (N=5,160)

SNP	Dietary fat	Phenotype	β	SE	<i>P</i>	β_{inv}	SE _{inv}	<i>P</i> _{inv}
rs174570	PUFA	Weight (kg)	-0.082	0.088	0.350	-0.004	0.007	0.601
rs174602	PUFA	Weight (kg)	-0.024	0.077	0.756	-0.002	0.006	0.721
rs74771917	PUFA	Weight (kg)	-0.164	0.133	0.217	-0.011	0.010	0.283
rs3168072	PUFA	Weight (kg)	-0.183	0.142	0.199	-0.012	0.011	0.253
rs12577276	PUFA	Weight (kg)	-0.162	0.142	0.253	-0.011	0.011	0.306
rs7115739	PUFA	Weight (kg)	-0.184	0.142	0.197	-0.013	0.011	0.251
rs174570	PUFA	BMI (kg/m ²)	-0.021	0.031	0.497	-0.004	0.008	0.666
rs174602	PUFA	BMI (kg/m ²)	-0.007	0.027	0.797	-0.002	0.007	0.732
rs74771917	PUFA	BMI (kg/m ²)	-0.054	0.047	0.253	-0.013	0.012	0.306
rs3168072	PUFA	BMI (kg/m ²)	-0.055	0.051	0.278	-0.014	0.013	0.284
rs12577276	PUFA	BMI (kg/m ²)	-0.049	0.050	0.332	-0.013	0.013	0.337
rs7115739	PUFA	BMI (kg/m ²)	-0.055	0.051	0.279	-0.015	0.013	0.271
rs174570	PUFA	HDL-C (mmol/l)	0.010	0.005	0.052	0.020	0.011	0.057
rs174602	PUFA	HDL-C (mmol/l)	0.006	0.005	0.161	0.004	0.010	0.697
rs74771917	PUFA	HDL-C (mmol/l)	0.000	0.007	0.985	-0.004	0.015	0.806
rs3168072	PUFA	HDL-C (mmol/l)	0.000	0.007	0.952	-0.005	0.015	0.730
rs12577276	PUFA	HDL-C (mmol/l)	-0.001	0.007	0.905	-0.007	0.015	0.671
rs7115739	PUFA	HDL-C (mmol/l)	0.001	0.007	0.927	0.000	0.015	0.979
rs174570	PUFA	LDL-C (mmol/l)	0.001	0.012	0.910	0.002	0.011	0.883
rs174602	PUFA	LDL-C (mmol/l)	0.020	0.012	0.076	0.017	0.010	0.073
rs74771917	PUFA	LDL-C (mmol/l)	0.020	0.018	0.254	0.017	0.015	0.245
rs3168072	PUFA	LDL-C (mmol/l)	0.025	0.018	0.171	0.022	0.015	0.160
rs12577276	PUFA	LDL-C (mmol/l)	0.024	0.018	0.190	0.021	0.015	0.178
rs7115739	PUFA	LDL-C (mmol/l)	0.020	0.018	0.278	0.017	0.015	0.259
rs174570	PUFA	Total cholesterol (mmol/l)	-0.003	0.010	0.732	-0.003	0.008	0.695
rs174602	PUFA	Total cholesterol (mmol/l)	0.023	0.009	0.007	0.019	0.007	0.005
rs74771917	PUFA	Total cholesterol (mmol/l)	0.006	0.015	0.663	0.006	0.012	0.634
rs3168072	PUFA	Total cholesterol (mmol/l)	0.011	0.016	0.496	0.009	0.013	0.460
rs12577276	PUFA	Total cholesterol (mmol/l)	0.014	0.016	0.367	0.012	0.013	0.328
rs7115739	PUFA	Total cholesterol (mmol/l)	0.010	0.016	0.530	0.009	0.013	0.484
rs174570	PUFA	Triglycerides (mmol/l)	0.001	0.007	0.882	-0.005	0.009	0.591
rs174602	PUFA	Triglycerides (mmol/l)	0.010	0.006	0.089	0.010	0.008	0.199
rs74771917	PUFA	Triglycerides (mmol/l)	0.011	0.010	0.259	0.018	0.013	0.165
rs3168072	PUFA	Triglycerides (mmol/l)	0.014	0.011	0.203	0.021	0.014	0.132
rs12577276	PUFA	Triglycerides (mmol/l)	0.014	0.011	0.174	0.022	0.014	0.114
rs7115739	PUFA	Triglycerides (mmol/l)	0.013	0.011	0.223	0.020	0.014	0.154
rs174570	PUFA	Fasting glucose (mmol/l)	-0.013	0.006	0.015	-0.018	0.008	0.031
rs174602	PUFA	Fasting glucose (mmol/l)	-0.001	0.005	0.782	-0.001	0.007	0.939
rs74771917	PUFA	Fasting glucose (mmol/l)	-0.005	0.008	0.513	-0.007	0.013	0.564
rs3168072	PUFA	Fasting glucose (mmol/l)	-0.007	0.009	0.440	-0.009	0.013	0.488
rs12577276	PUFA	Fasting glucose (mmol/l)	-0.007	0.009	0.418	-0.009	0.013	0.483
rs7115739	PUFA	Fasting glucose (mmol/l)	-0.007	0.009	0.422	-0.010	0.013	0.466
rs174570	PUFA	2-h glucose (mmol/l)	-0.002	0.012	0.877	0.002	0.008	0.846
rs174602	PUFA	2-h glucose (mmol/l)	-0.003	0.011	0.802	-0.001	0.007	0.885
rs74771917	PUFA	2-h glucose (mmol/l)	-0.023	0.018	0.210	-0.014	0.012	0.247
rs3168072	PUFA	2-h glucose (mmol/l)	-0.006	0.020	0.753	-0.002	0.013	0.884
rs12577276	PUFA	2-h glucose (mmol/l)	-0.011	0.020	0.581	-0.005	0.013	0.679
rs7115739	PUFA	2-h glucose (mmol/l)	-0.008	0.020	0.668	-0.004	0.013	0.782
rs174570	n-3 PUFA	Weight (kg)	-0.181	0.588	0.758	0.001	0.045	0.985

rs174602	n-3 PUFA	Weight (kg)	0.198	0.525	0.706	0.011	0.040	0.787
rs74771917	n-3 PUFA	Weight (kg)	-1.163	0.950	0.221	-0.079	0.073	0.277
rs3168072	n-3 PUFA	Weight (kg)	-1.265	1.032	0.220	-0.088	0.079	0.263
rs12577276	n-3 PUFA	Weight (kg)	-1.096	1.017	0.281	-0.078	0.078	0.317
rs7115739	n-3 PUFA	Weight (kg)	-1.234	1.024	0.228	-0.086	0.078	0.271
rs174570	n-3 PUFA	BMI (kg/m ²)	-0.014	0.209	0.945	0.006	0.055	0.916
rs174602	n-3 PUFA	BMI (kg/m ²)	0.067	0.187	0.718	0.016	0.049	0.751
rs74771917	n-3 PUFA	BMI (kg/m ²)	-0.375	0.338	0.268	-0.088	0.089	0.326
rs3168072	n-3 PUFA	BMI (kg/m ²)	-0.380	0.367	0.301	-0.095	0.097	0.327
rs12577276	n-3 PUFA	BMI (kg/m ²)	-0.335	0.362	0.355	-0.084	0.095	0.376
rs7115739	n-3 PUFA	BMI (kg/m ²)	-0.370	0.364	0.310	-0.095	0.096	0.322
rs174570	n-3 PUFA	HDL-C (mmol/l)	0.068	0.034	0.046	0.114	0.072	0.113
rs174602	n-3 PUFA	HDL-C (mmol/l)	0.046	0.032	0.143	0.023	0.066	0.726
rs74771917	n-3 PUFA	HDL-C (mmol/l)	0.023	0.053	0.663	0.004	0.112	0.968
rs3168072	n-3 PUFA	HDL-C (mmol/l)	0.015	0.055	0.779	-0.030	0.115	0.792
rs12577276	n-3 PUFA	HDL-C (mmol/l)	0.013	0.055	0.812	-0.036	0.114	0.752
rs7115739	n-3 PUFA	HDL-C (mmol/l)	0.019	0.054	0.728	0.007	0.114	0.950
rs174570	n-3 PUFA	LDL-C (mmol/l)	0.011	0.085	0.902	0.011	0.072	0.883
rs174602	n-3 PUFA	LDL-C (mmol/l)	0.192	0.079	0.014	0.166	0.066	0.013
rs74771917	n-3 PUFA	LDL-C (mmol/l)	0.131	0.133	0.325	0.113	0.112	0.315
rs3168072	n-3 PUFA	LDL-C (mmol/l)	0.161	0.136	0.238	0.139	0.115	0.227
rs12577276	n-3 PUFA	LDL-C (mmol/l)	0.150	0.136	0.270	0.130	0.115	0.258
rs7115739	n-3 PUFA	LDL-C (mmol/l)	0.080	0.135	0.552	0.073	0.114	0.525
rs174570	n-3 PUFA	Total cholesterol (mmol/l)	-0.028	0.065	0.671	-0.028	0.052	0.589
rs174602	n-3 PUFA	Total cholesterol (mmol/l)	0.186	0.058	0.001	0.153	0.047	0.001
rs74771917	n-3 PUFA	Total cholesterol (mmol/l)	0.017	0.105	0.871	0.014	0.084	0.871
rs3168072	n-3 PUFA	Total cholesterol (mmol/l)	0.038	0.114	0.740	0.033	0.092	0.719
rs12577276	n-3 PUFA	Total cholesterol (mmol/l)	0.072	0.113	0.523	0.063	0.090	0.484
rs7115739	n-3 PUFA	Total cholesterol (mmol/l)	0.001	0.113	0.994	0.006	0.091	0.947
rs174570	n-3 PUFA	Triglycerides (mmol/l)	0.005	0.045	0.908	-0.021	0.059	0.721
rs174602	n-3 PUFA	Triglycerides (mmol/l)	0.075	0.041	0.064	0.077	0.053	0.151
rs74771917	n-3 PUFA	Triglycerides (mmol/l)	0.057	0.073	0.432	0.111	0.095	0.243
rs3168072	n-3 PUFA	Triglycerides (mmol/l)	0.063	0.078	0.419	0.126	0.103	0.219
rs12577276	n-3 PUFA	Triglycerides (mmol/l)	0.073	0.077	0.343	0.137	0.101	0.175
rs7115739	n-3 PUFA	Triglycerides (mmol/l)	0.057	0.078	0.461	0.114	0.102	0.264
rs174570	n-3 PUFA	Fasting glucose (mmol/l)	-0.052	0.037	0.158	-0.073	0.056	0.187
rs174602	n-3 PUFA	Fasting glucose (mmol/l)	-0.012	0.033	0.723	-0.008	0.050	0.865
rs74771917	n-3 PUFA	Fasting glucose (mmol/l)	-0.031	0.060	0.603	-0.047	0.090	0.598
rs3168072	n-3 PUFA	Fasting glucose (mmol/l)	-0.035	0.065	0.591	-0.052	0.097	0.595
rs12577276	n-3 PUFA	Fasting glucose (mmol/l)	-0.038	0.064	0.551	-0.053	0.096	0.582
rs7115739	n-3 PUFA	Fasting glucose (mmol/l)	-0.040	0.064	0.532	-0.060	0.097	0.532
rs174570	n-3 PUFA	2-h glucose (mmol/l)	0.045	0.082	0.583	0.048	0.054	0.375
rs174602	n-3 PUFA	2-h glucose (mmol/l)	0.041	0.073	0.572	0.032	0.048	0.505
rs74771917	n-3 PUFA	2-h glucose (mmol/l)	-0.037	0.131	0.779	-0.016	0.087	0.856
rs3168072	n-3 PUFA	2-h glucose (mmol/l)	0.037	0.143	0.795	0.039	0.094	0.682
rs12577276	n-3 PUFA	2-h glucose (mmol/l)	-0.018	0.141	0.899	-0.003	0.093	0.978
rs7115739	n-3 PUFA	2-h glucose (mmol/l)	-0.018	0.141	0.901	-0.003	0.093	0.978
rs174570	n-6 PUFA	Weight (kg)	-0.130	0.107	0.224	-0.007	0.008	0.418
rs174602	n-6 PUFA	Weight (kg)	-0.013	0.095	0.889	-0.001	0.007	0.868
rs74771917	n-6 PUFA	Weight (kg)	-0.216	0.157	0.169	-0.015	0.012	0.228
rs3168072	n-6 PUFA	Weight (kg)	-0.221	0.165	0.180	-0.015	0.013	0.234
rs12577276	n-6 PUFA	Weight (kg)	-0.196	0.164	0.232	-0.013	0.013	0.288
rs7115739	n-6 PUFA	Weight (kg)	-0.228	0.165	0.168	-0.016	0.013	0.210

rs174570	n-6 PUFA	BMI (kg/m ²)	-0.036	0.038	0.344	-0.007	0.010	0.485
rs174602	n-6 PUFA	BMI (kg/m ²)	-0.001	0.034	0.967	-0.001	0.009	0.895
rs74771917	n-6 PUFA	BMI (kg/m ²)	-0.067	0.056	0.227	-0.017	0.015	0.248
rs3168072	n-6 PUFA	BMI (kg/m ²)	-0.065	0.059	0.271	-0.017	0.015	0.263
rs12577276	n-6 PUFA	BMI (kg/m ²)	-0.057	0.058	0.326	-0.015	0.015	0.316
rs7115739	n-6 PUFA	BMI (kg/m ²)	-0.068	0.059	0.250	-0.019	0.015	0.229
rs174570	n-6 PUFA	HDL-C (mmol/l)	0.008	0.006	0.211	0.017	0.013	0.186
rs174602	n-6 PUFA	HDL-C (mmol/l)	0.007	0.006	0.241	0.005	0.012	0.681
rs74771917	n-6 PUFA	HDL-C (mmol/l)	0.001	0.008	0.876	0.002	0.017	0.905
rs3168072	n-6 PUFA	HDL-C (mmol/l)	0.000	0.008	0.990	-0.002	0.017	0.901
rs12577276	n-6 PUFA	HDL-C (mmol/l)	-0.001	0.008	0.944	-0.004	0.017	0.835
rs7115739	n-6 PUFA	HDL-C (mmol/l)	0.002	0.008	0.834	0.003	0.017	0.858
rs174570	n-6 PUFA	LDL-C (mmol/l)	0.006	0.015	0.711	0.005	0.013	0.701
rs174602	n-6 PUFA	LDL-C (mmol/l)	0.030	0.014	0.034	0.025	0.012	0.033
rs74771917	n-6 PUFA	LDL-C (mmol/l)	0.027	0.020	0.173	0.024	0.017	0.166
rs3168072	n-6 PUFA	LDL-C (mmol/l)	0.031	0.020	0.134	0.026	0.017	0.127
rs12577276	n-6 PUFA	LDL-C (mmol/l)	0.029	0.020	0.153	0.025	0.017	0.145
rs7115739	n-6 PUFA	LDL-C (mmol/l)	0.025	0.020	0.225	0.022	0.017	0.212
rs174570	n-6 PUFA	Total cholesterol (mmol/l)	-0.002	0.012	0.892	-0.002	0.010	0.824
rs174602	n-6 PUFA	Total cholesterol (mmol/l)	0.025	0.010	0.019	0.020	0.008	0.016
rs74771917	n-6 PUFA	Total cholesterol (mmol/l)	0.012	0.017	0.482	0.010	0.014	0.472
rs3168072	n-6 PUFA	Total cholesterol (mmol/l)	0.016	0.018	0.375	0.014	0.015	0.357
rs12577276	n-6 PUFA	Total cholesterol (mmol/l)	0.019	0.018	0.296	0.016	0.015	0.273
rs7115739	n-6 PUFA	Total cholesterol (mmol/l)	0.014	0.018	0.429	0.012	0.015	0.398
rs174570	n-6 PUFA	Triglycerides (mmol/l)	0.003	0.008	0.737	-0.005	0.011	0.625
rs174602	n-6 PUFA	Triglycerides (mmol/l)	0.014	0.007	0.053	0.014	0.010	0.133
rs74771917	n-6 PUFA	Triglycerides (mmol/l)	0.013	0.012	0.252	0.020	0.015	0.182
rs3168072	n-6 PUFA	Triglycerides (mmol/l)	0.015	0.012	0.226	0.022	0.016	0.164
rs12577276	n-6 PUFA	Triglycerides (mmol/l)	0.016	0.012	0.198	0.024	0.016	0.139
rs7115739	n-6 PUFA	Triglycerides (mmol/l)	0.015	0.012	0.223	0.022	0.016	0.171
rs174570	n-6 PUFA	Fasting glucose (mmol/l)	-0.019	0.007	0.005	-0.026	0.010	0.009
rs174602	n-6 PUFA	Fasting glucose (mmol/l)	-0.003	0.006	0.621	-0.002	0.009	0.837
rs74771917	n-6 PUFA	Fasting glucose (mmol/l)	-0.001	0.010	0.884	0.000	0.015	0.980
rs3168072	n-6 PUFA	Fasting glucose (mmol/l)	-0.005	0.010	0.660	-0.004	0.016	0.777
rs12577276	n-6 PUFA	Fasting glucose (mmol/l)	-0.004	0.010	0.666	-0.004	0.015	0.804
rs7115739	n-6 PUFA	Fasting glucose (mmol/l)	-0.007	0.010	0.512	-0.008	0.016	0.616
rs174570	n-6 PUFA	2-h glucose (mmol/l)	-0.003	0.015	0.833	0.000	0.010	0.977
rs174602	n-6 PUFA	2-h glucose (mmol/l)	-0.001	0.013	0.939	0.000	0.009	0.995
rs74771917	n-6 PUFA	2-h glucose (mmol/l)	-0.025	0.022	0.257	-0.015	0.014	0.310
rs3168072	n-6 PUFA	2-h glucose (mmol/l)	-0.012	0.023	0.605	-0.005	0.015	0.729
rs12577276	n-6 PUFA	2-h glucose (mmol/l)	-0.017	0.023	0.456	-0.009	0.015	0.543
rs7115739	n-6 PUFA	2-h glucose (mmol/l)	-0.012	0.023	0.609	-0.006	0.015	0.713

β - beta effect estimate; BMI - body mass index; HDL-C - high-density lipoprotein cholesterol; LDL-C - low-density lipoprotein cholesterol; PUFA - polyunsaturated fat intake; SE - standard error; SNP - single nucleotide polymorphism.