

Table 1. Allele and genotype frequencies for all SNP markers.

Gene	SNP	Genotype	Genotype Frequency (%)	Allele	Allele Frequency (%)
ELOVL2	rs8523	AA	56.54	Allele A	75.00
		AG	36.91	Allele G	25.00
		GG	6.54		
	rs3734396	AA	87.79	Allele A	93.48
		AG	11.37	Allele G	6.52
		GG	0.84		
	rs17606561	GG	63.93	Allele G	80.00
		GA	32.21	Allele A	20.00
		AA	3.86		
	rs3734398	GG	53.09	Allele G	72.50
		GA	38.90	Allele A	27.50
		AA	8.01		
	GSA-rs2281591	AA	60.34	Allele A	77.60
		AG	34.62	Allele G	22.40
		GG	5.04		
	rs2236212	GG	43.91	Allele G	66.10
		GC	44.41	Allele C	33.90
		CC	11.69		
	rs3798713	GG	44.39	Allele G	66.33
		GC	43.89	Allele C	33.70
		CC	11.73		
	GSA-rs7765206	CC	94.82	Allele C	97.25
		CA	4.84	Allele A	2.80
		AA	0.33		
	rs9295757	CC	63.09	Allele C	79.53
		CA	32.89	Allele A	20.50
		AA	4.03		
	rs3798721	AA	58.82	Allele A	77.00
		AC	36.30	Allele C	23.00
		CC	4.87		
GSA-rs16870899	AA	95.66	Allele A	97.75	
	AG	4.17	Allele G	2.30	
	GG	0.17			
rs3798722	AA	55.63	Allele A	74.70	
	AG	6.22	Allele G	25.29	
	GG	38.15			
rs9393903	GG	63.59	Allele G	79.95	
	GA	32.72	Allele A	20.05	
	AA	3.69			
rs4532436	GG	55.91	Allele G	74.58	
	CG	37.33	Allele C	25.42	
	CC	6.76			

		GG	86.15	Allele G	92.91
	rs12195587	AG	13.51	Allele A	7.10
		AA	0.34		
ELOVL3		AA	23.79	Allele G	51.76
	rs10748816	GA	48.91	Allele A	48.24
		GG	27.30		
		GG	97.83	Allele G	98.92
	GSA-rs36103207	GA	2.17	Allele A	1.09
		AA	-		
ELOVL4		AA	68.90	Allele A	82.78
	rs3812153	AG	27.76	Allele G	17.22
		GG	3.34		
		GG	96.33	Allele G	98.16
	GSA-rs117891930	GA	3.67	Allele A	1.84
		AA	-		
		AA	93.82	Allele A	96.83
	GSA-rs80246554	AG	6.01	Allele G	3.17
		GG	0.17		
		GG	84.27	Allele G	91.70
	rs12196014	GA	14.86	Allele A	8.30
		AA	0.87		
		GG	68.73	Allele G	82.69
	rs9448863	GA	27.93	Allele A	17.31
		AA	3.34		
		AA	96.82	Allele A	98.41
	GSA-rs16891339	AG	3.18	Allele G	1.59
		GG	-		
ELOVL5		CC	97.83	Allele C	98.92
	GSA-rs41273878	CA	2.17	Allele A	1.09
		AA	-		
		GG	98.83	Allele G	99.33
	GSA-rs72938776	GA	1.00	Allele A	0.67
		AA	0.17		
		AA	96.99	Allele A	98.50
	GSA-rs36054518	AG	3.01	Allele G	1.51
		GG	-		
		AA	98.49	Allele A	99.25
	GSA-rs72940713	AG	1.51	Allele G	0.75
		GG	-		
		AA	97.82	Allele A	98.91
	GSA-rs114271869	AC	2.18	Allele C	1.09
		CC	-		
	GG	28.52	Allele G	51.03	
rs 2073040	AG	45.02	Allele A	48.97	
	AA	26.46			
	CC	72.05	Allele C	84.46	
rs 9370194	CT	24.83	Allele T	15.54	
	TT	3.13			
ELOVL6	rs11098065	GG	57.62	Allele G	75.63

	GA	36.01	Allele A	24.37
	AA	6.37		
rs17041284	AA	96.66	Allele A	98.33
	AG	3.34	Allele G	1.67
	GG	-		
rs7662161	AA	59.13	Allele A	76.05
	AG	33.84	Allele G	23.95
	GG	7.04		
GSA-rs77958351	GG	97.16	Allele G	98.58
	GA	2.84	Allele A	1.42
	AA	-		
rs59634436	AA	89.08	Allele A	94.37
	AC	10.59	Allele C	5.63
	CC	0.34		
GSA-rs78160528	GG	96.99	Allele G	98.41
	GA	2.84	Allele A	1.59
	AA	0.17		
rs16997129	AA	30.49	Allele A	55.70
	AG	50.42	Allele G	44.31
	GG	19.10		
GSA-rs3813827	GG	97.33	Allele G	98.66
	GA	2.67	Allele A	1.34
	AA	-		
rs11737840	GG	77.72	Allele G	88.61
	GA	21.78	Allele A	11.39
	AA	0.50		
rs10033691	AA	86.48	Allele A	92.99
	AG	13.02	Allele G	7.01
	GG	0.50		
GSA-rs2005701	AA	34.29	Allele A	57.48
	AG	46.39	Allele G	42.52
	GG	19.33		
GSA-rs76145164	GG	96.48	Allele G	98.16
	GA	3.35	Allele A	1.84
	AA	0.17		
GSA-rs76338299	CC	90.80	Allele C	95.23
	CA	8.86	Allele A	4.77
	AA	0.33		
rs6533491	GG	48.16	Allele G	69.90
	GA	43.48	Allele A	30.10
	AA	8.36		
rs11937052	AA	86.14	Allele A	93.24
	AG	13.52	Allele G	6.76
	GG	0.33		
rs11098070	GG	26.01	Allele G	53.10
	GA	54.19	Allele A	46.90
	AA	19.80		
rs80343897	AA	59.30	Allele A	77.05

	AG	35.51	Allele G	22.95
	GG	5.19		
GSA-rs114422025	AA	97.83	Allele A	98.80
	AG	2.00	Allele G	1.20
	GG	0.17		
rs6533495	GG	29.82	Allele G	55.19
	GA	50.75	Allele A	44.81
	AA	19.43		
rs28722886	GG	56.54	Allele G	76.32
	GA	39.56	Allele A	23.68
	AA	3.90		
rs6533497	GG	82.24	Allele G	90.20
	GA	15.91	Allele A	9.80
	AA	1.84		
GSA-rs77504516	AA	93.97	Allele A	96.99
	AG	6.03	Allele G	3.02
	GG	-		
rs6815102	AA	41.95	Allele A	65.10
	AG	46.31	Allele G	34.90
	GG	11.74		
rs4326075	AA	59.97	Allele A	77.22
	AC	34.51	Allele C	22.78
	CC	5.53		
GSA-rs116418972	AA	98.16	Allele A	99.08
	AG	1.84	Allele G	0.92
	GG	-		
rs11729740	GG	88.81	Allele G	94.32
	GA	11.02	Allele A	5.68
	AA	0.17		
rs2035415	GG	27.09	Allele G	53.43
	GA	52.68	Allele A	46.57
	AA	20.23		
GSA-rs17041402	AA	97.16	Allele A	98.58
	AC	2.84	Allele C	1.42
	CC	-		
rs59111930	AA	47.49	Allele A	69.06
	AG	43.14	Allele G	30.94
	GG	9.36		
rs74874270	AA	94.99	Allele A	97.33
	AG	4.67	Allele G	2.67
	GG	0.33		
rs1384331	AA	34.67	Allele A	59.72
	AC	50.08	Allele C	40.29
	CC	15.24		
GSA-rs72679246	AA	97.59	Allele A	98.80
	CA	2.41	Allele C	1.20
	CC	-		
rs78563565	AA	95.66	Allele A	97.83

	AG	4.34	Allele G	2.17
	GG	-		
rs6533498	CC	47.49	Allele C	69.15
	CA	9.20	Allele A	30.85
	AA	43.31		
rs 9997926	CC	91.36	Allele C	95.68
	CT	8.64	Allele T	4.32
	TT	-		
rs 6824447	GG	43.47	Allele G	64.61
	AG	42.27	Allele A	35.40
	AA	14.26		
rs 17041272	CC	83.61	Allele C	91.30
	CG	15.37	Allele G	8.70
	GG	1.01		
GSA-rs75621404	GG	97.66	Allele G	98.83
	GA	2.34	Allele A	1.17
	AA	-		
GSA-rs1563517	CC	69.35	Allele C	83.50
	CA	28.31	Allele A	16.50
	AA	2.35		
GSA-rs12188996	AA	98.49	Allele A	99.24
	AC	1.51	Allele C	0.76
	CC	-		
GSA-rs60258111	GG	98.48	Allele G	99.24
	GA	1.52	Allele A	0.76
	AA	-		
GSA-rs16878426	AA	98.16	Allele A	99.08
	AG	1.84	Allele G	0.92
	GG	-		
rs6872863	GG	35.01	Allele G	58.88
	GA	47.74	Allele A	41.12
	AA	17.25		
GSA-rs76641655	AA	96.99	Allele A	98.50
	AC	3.01	Allele C	1.50
	CC	-		
GSA-rs114011218	AA	97.83	Allele A	98.91
	AG	2.17	Allele G	1.09
	GG	-		
GSA-rs115159664	AA	96.49	Allele A	98.16
	AG	3.34	Allele G	1.84
	GG	0.17		
rs4700398	GG	51.93	Allele G	71.26
	GA	38.66	Allele A	28.74
	AA	9.41		

ELOVL7

A: Adenine; T: Thymine; G: Guanine; C: Cytosine.

Table 2. Association of SNPs with clinical markers of chronic non-communicable diseases.

ELOVL2												
rs8523												
Clinical marker	Total			Men			Women					
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.29 0	0.91 2	1.825	0.151	1.24 0	0.75 4	2.03 7	0.398	1.37 6	0.84 4	2.245	0.202
H- Waist	1.33 8	0.94 3	1.899	0.103	1.40 9	0.82 0	2.42 1	0.215	1.22 2	0.76 8	1.947	0.399
H-WHI	0.92 0	0.66 2	1.278	0.620	1.10 4	0.68 3	1.78 3	0.688	0.88 3	0.53 5	1.458	0.628
H-WHR	1.16 1	0.83 5	1.613	0.376	1.14 0	0.70 7	1.84 0	0.592	1.17 9	0.74 7	1.859	0.481
H-%BF	0.98 9	0.70 9	1.378	0.946	1.15 2	0.71 0	1.87 0	0.569	0.88 9	0.56 1	1.410	0.619
H-Insulin	2.04 8	1.23 8	3.388	0.005	2.30 5	1.17 2	4.53 2	0.014	1.87 4	0.86 9	4.041	0.106
H-Glucose	1.48 1	0.56 3	3.892	0.424	1.88 1	0.49 4	7.15 7	0.349	1.16 5	0.28 6	4.747	0.831
H-HOMA	1.84 7	1.13 2	3.013	0.013	2.09 9	1.09 4	4.02 7	0.024	1.71 9	0.80 9	3.654	0.157
H-Cholesterol	2.62 8	1.40 0	4.935	0.002	3.15 4	1.40 8	7.06 1	0.004	2.22 2	0.80 0	6.169	0.118
H-Triglycerides	1.03 7	0.69 3	1.552	0.861	1.28 9	0.75 0	2.21 6	0.359	0.84 8	0.45 8	1.571	0.602
L-HDL	0.91 5	0.65 2	1.283	0.606	0.80 9	0.46 5	1.40 7	0.454	0.89 2	0.57 0	1.398	0.620
H-LDL	1.42 4	0.65 7	3.085	0.369	2.21 0	0.81 6	5.98 6	0.112	0.76 7	0.21 2	2.775	0.687
rs3734396												
Clinical marker	Total			Men			Women					
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	0.74 7	0.43 2	1.291	0.296	0.59 7	0.27 8	1.28 2	0.183	0.94 1	0.42 9	2.065	0.880
H- Waist	0.71 5	0.40 7	1.257	0.243	0.75 4	0.32 9	1.72 5	0.504	0.72 6	0.33 2	1.586	0.422
H-WHI	0.84 7	0.51 1	1.402	0.518	0.82 1	0.41 6	1.61 8	0.569	0.66 8	0.27 9	1.602	0.365
H-WHR	0.76 9	0.46 3	1.278	0.311	0.61 8	0.30 3	1.25 9	0.184	0.97 6	0.47 0	2.027	0.949
H-%BF	0.85 6	0.51 8	1.413	0.543	0.65 5	0.32 6	1.31 7	0.234	1.11 4	0.54 0	2.299	0.772
H-Insulin	1.10 7	0.52 8	2.320	0.789	0.59 4	0.19 3	1.82 9	0.362	2.07 6	0.76 1	5.666	0.148
H-HOMA	1.17 0	0.56 8	2.411	0.671	0.88 0	0.31 8	2.43 1	0.806	1.60 7	0.57 1	4.521	0.366
H-Cholesterol	1.28 6	0.55 3	2.988	0.559	1.01 9	0.33 5	3.10 6	0.873	1.69 0	0.46 3	6.167	0.423
H-Triglycerides	0.74 2	0.38 6	1.427	0.371	0.88 1	0.39 7	1.95 6	0.756	0.47 4	0.13 9	1.614	0.224

L-HDL	0.98 3	0.59 0	1.640	0.949	1.23 1	0.57 8	2.62 0	0.591	0.90 6	0.44 2	1.855	0.787
H-LDL	2.14 9	0.83 8	5.515	0.104	1.39 3	0.38 1	5.08 7	0.615	3.73 3	0.91 8	15.17 7	0.050
rs17606561												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.82 6	0.57 5	1.186	0.301	0.84 1	0.49 8	1.41 7	0.516	0.82 6	0.49 9	1.367	0.458
H- Waist	0.69 2	0.47 7	1.004	0.052	0.65 0	0.35 9	1.17 9	0.155	0.67 9	0.41 8	1.104	0.188
H-WHI	1.13 6	0.81 0	1.594	0.461	1.42 4	0.86 0	2.36 0	0.170	1.06 6	0.64 0	1.777	0.806
H-WHR	0.84 9	0.60 4	1.194	0.347	0.90 4	0.54 9	1.48 6	0.691	0.80 4	0.50 3	1.284	0.362
H-%BF	0.95 4	0.67 8	1.343	0.790	0.88 5	0.53 6	1.46 0	0.633	1.04 7	0.65 5	1.675	0.848
H-Insulin	0.60 2	0.34 6	1.049	0.071	0.29 1	0.12 2	0.69 3	0.004	1.29 8	0.60 0	2.808	0.509
H-Glucose	0.37 1	0.10 5	1.306	0.109	0.23 9	0.03 0	1.94 3	0.148	0.52 7	0.10 5	2.655	0.432
H-HOMA	0.52 1	0.29 8	0.914	0.021	0.20 4	0.07 7	0.53 9	0.001	1.24 1	0.58 3	2.645	0.576
H-Cholesterol	0.60 3	0.30 5	1.191	0.142	0.73 2	0.31 1	1.71 9	0.474	0.47 6	0.15 2	1.496	0.196
H-Triglycerides	0.62 5	0.40 4	0.968	0.034	0.69 8	0.38 8	1.25 6	0.231	0.57 4	0.29 5	1.116	0.100
L-HDL	1.28 7	0.91 1	1.818	0.152	1.26 1	0.72 3	2.20 0	0.416	1.22 6	0.77 5	1.940	0.385
H-LDL	0.88 1	0.38 9	1.997	0.762	0.81 5	0.27 9	2.38 4	0.710	1.07 2	0.29 6	3.882	0.915
rs3734398												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.44 1	1.02 0	2.036	0.038	1.33 2	0.81 5	2.17 5	0.253	1.58 3	0.97 0	2.583	0.065
H- Waist	1.30 4	0.92 0	1.847	0.135	1.36 0	0.79 5	2.32 9	0.263	1.22 3	0.76 9	1.945	0.396
H-WHI	0.85 7	0.61 8	1.187	0.354	0.96 5	0.60 3	1.54 6	0.883	0.81 5	0.49 5	1.343	0.423
H-WHR	1.16 5	0.84 1	1.615	0.359	1.11 9	0.69 9	1.79 2	0.641	1.21 1	0.76 9	1.907	0.410
H-%BF	1.06 0	0.76 3	1.473	0.729	1.18 1	0.73 4	1.90 0	0.495	0.97 9	0.61 9	1.548	0.928
H-Insulin	1.89 4	1.14 6	3.130	0.012	2.22 2	1.13 3	4.36 0	0.019	1.61 8	0.75 1	3.486	0.228
H-Glucose	1.28 2	0.48 8	3.369	0.614	1.54 0	0.40 5	5.85 7	0.525	1.06 1	0.26 1	4.321	0.934
H-HOMA	1.78 0	1.08 8	2.912	0.020	2.08 0	1.07 9	4.00 9	0.027	1.54 1	0.72 5	3.274	0.260
H-Cholesterol	2.34 1	1.25 1	4.378	0.006	3.01 0	1.32 0	6.86 4	0.006	1.71 7	0.64 8	4.553	0.274

H-Triglycerides	1.269	0.852	1.889	0.242	1.506	0.882	2.573	0.133	1.071	0.585	1.962	0.824
L-HDL	0.934	0.669	1.306	0.692	0.894	0.522	1.530	0.683	0.906	0.580	1.415	0.664
H-LDL	1.685	0.769	3.695	0.189	2.342	0.842	6.515	0.095	1.062	0.301	3.743	0.926
rs2281591												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.856	0.601	1.219	0.390	0.925	0.558	1.532	0.762	0.802	0.488	1.320	0.387
H- Waist	0.641	0.445	0.924	0.017	0.650	0.367	1.153	0.140	0.610	0.377	0.988	0.044
H-WHI	1.078	0.772	1.504	0.660	1.365	0.837	2.225	0.213	0.917	0.551	1.524	0.739
H-WHR	0.833	0.596	1.164	0.286	1.001	0.617	1.623	0.998	0.704	0.443	1.121	0.140
H-%BF	0.938	0.670	1.312	0.708	0.910	0.559	1.482	0.706	0.976	0.613	1.554	0.918
H-Insulin	0.517	0.297	0.899	0.018	0.240	0.101	0.572	0.001	1.136	0.526	2.454	0.746
H-Glucose	0.459	0.148	1.425	0.168	0.451	0.092	2.213	0.317	0.472	0.094	2.377	0.354
H-HOMA	0.479	0.276	0.831	0.008	0.204	0.083	0.503	0.001	1.108	0.521	2.358	0.791
H-Cholesterol	0.576	0.296	1.119	0.100	0.702	0.307	1.603	0.401	0.425	0.135	1.336	0.133
H-Triglycerides	0.767	0.506	1.164	0.213	0.912	0.523	1.589	0.746	0.632	0.332	1.202	0.160
L-HDL	1.189	0.846	1.672	0.319	1.157	0.668	2.001	0.604	1.175	0.746	1.850	0.488
H-LDL	1.048	0.478	2.300	0.907	0.874	0.314	2.435	0.797	1.459	0.414	5.148	0.556
rs2236212												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.204	0.849	1.707	0.297	0.986	0.604	1.611	0.956	1.492	0.904	2.463	0.117
H- Waist	1.091	0.768	1.550	0.628	1.092	0.636	1.874	0.751	1.063	0.665	1.699	0.800
H-WHI	0.790	0.569	1.096	0.158	0.850	0.531	1.363	0.502	0.748	0.454	1.235	0.257
H-WHR	0.981	0.706	1.362	0.909	0.887	0.554	1.419	0.617	1.080	0.682	1.710	0.743
H-%BF	0.947	0.680	1.318	0.747	0.903	0.562	1.451	0.675	1.009	0.635	1.605	0.969
H-Insulin	1.922	1.135	3.254	0.014	2.198	1.088	4.441	0.026	1.688	0.755	3.774	0.201
H-Glucose	0.877	0.334	2.306	0.791	1.029	0.271	3.915	0.966	0.741	0.182	3.020	0.676
H-HOMA	1.995	1.184	3.361	0.009	2.415	1.200	4.859	0.012	1.643	0.744	3.626	0.217

H-Cholesterol	2.43 2	1.23 6	4.785	0.008	2.84 2	1.17 3	6.88 6	0.016	2.01 7	0.70 1	5.804	0.187
H-Triglycerides	1.16 2	0.77 6	1.739	0.467	1.51 9	0.87 9	2.62 5	0.136	0.85 5	0.46 6	1.571	0.615
L-HDL	0.91 1	0.65 2	1.275	0.588	0.89 4	0.52 4	1.52 6	0.683	0.88 0	0.56 1	1.381	0.580
H-LDL	2.85 6	1.13 6	7.181	0.020	2.82 4	0.89 8	8.88 2	0.065	3.08 2	0.64 4	14.75 9	0.140
rs3798713												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.16 5	0.82 2	1.650	0.391	0.94 5	0.57 8	1.54 4	0.821	1.45 4	0.88 3	2.394	0.141
H- Waist	1.12 2	0.79 0	1.595	0.520	1.19 9	0.69 7	2.06 1	0.513	1.04 6	0.65 5	1.671	0.850
H-WHI	0.79 7	0.57 4	1.106	0.174	0.88 1	0.54 9	1.41 2	0.599	0.72 8	0.44 1	1.200	0.214
H-WHR	0.97 5	0.70 2	1.354	0.882	0.88 3	0.55 1	1.41 4	0.606	1.07 2	0.67 8	1.695	0.768
H-%BF	0.94 6	0.68 0	1.317	0.743	0.90 4	0.56 2	1.45 4	0.678	1.00 5	0.63 3	1.596	0.983
H-Insulin	1.64 4	0.97 8	2.762	0.059	1.63 1	0.81 9	3.24 7	0.163	1.72 4	0.77 1	3.854	0.183
H-Glucose	0.70 2	0.26 7	1.846	0.472	0.65 8	0.17 3	2.50 2	0.538	0.76 2	0.18 7	3.102	0.704
H-HOMA	1.76 5	1.05 8	2.944	0.028	1.88 8	0.95 9	3.71 5	0.064	1.69 4	0.76 8	3.739	0.189
H-Cholesterol	2.48 5	1.26 3	4.888	0.007	2.88 5	1.19 1	6.99 0	0.015	2.07 4	0.72 1	5.966	0.169
H-Triglycerides	1.12 1	0.74 9	1.678	0.579	1.38 6	0.80 3	2.39 3	0.242	0.88 2	0.48 1	1.620	0.688
L-HDL	0.92 7	0.66 3	1.298	0.661	0.94 7	0.55 3	1.62 1	0.842	0.87 7	0.55 9	1.375	0.569
H-LDL	2.91 5	1.15 9	7.330	0.018	2.86 4	0.91 0	9.00 7	0.062	3.16 7	0.66 1	15.16 2	0.130
rs7765206												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.11 5	0.52 3	2.376	0.778	1.03 4	0.33 7	3.17 5	0.953	1.20 1	0.43 1	3.351	0.727
H- Waist	0.52 0	0.21 0	1.291	0.153	0.22 3	0.02 9	1.73 6	0.119	0.70 6	0.24 2	2.058	0.523
H-WHI	0.54 0	0.24 4	1.195	0.124	0.53 0	0.17 9	1.56 8	0.246	0.53 7	0.15 0	1.917	0.333
H-WHR	0.83 0	0.39 5	1.743	0.623	0.99 4	0.33 6	2.94 2	0.991	0.71 1	0.25 6	1.976	0.513
H-%BF	0.90 5	0.43 3	1.890	0.790	0.91 2	0.31 1	2.67 4	0.868	0.90 4	0.32 8	2.496	0.847
H-Insulin	0.22 6	0.03 0	1.718	0.117	0.76 0	0.70 2	0.82 3	0.141	0.50 3	0.06 3	4.009	0.511
H-Glucose	0.97 0	0.95 6	0.984	0.329	0.96 7	0.94 6	0.98 8	0.493	0.97 3	0.95 4	0.992	0.492

H-HOMA	0.22 9	0.03 1	1.711	0.117	0.81 5	0.76 7	0.86 5	0.101	0.59 0	0.07 5	4.651	0.614
H-Cholesterol	0.37 8	0.05 0	2.837	0.327	0.67 6	0.08 5	5.36 2	0.710	0.93 9	0.91 2	0.967	0.295
H-Triglycerides	1.93 9	0.88 8	4.233	0.092	2.36 4	0.79 1	7.05 9	0.114	1.65 9	0.51 8	5.313	0.391
L-HDL	1.29 9	0.62 3	2.705	0.485	1.21 2	0.36 8	3.98 9	0.753	1.32 5	0.49 7	3.529	0.574
H-LDL	1.49 8	0.33 8	6.633	0.593	1.24 0	0.15 3	10.0 86	0.841	1.97 9	0.23 6	16.59 6	0.523
rs9295757												
	Total				Men				Women			
Clinical marker	OR	95% CI		<i>p</i>-value	OR	95% CI		<i>p</i>-value	OR	95% CI		<i>p</i>-value
H-BMI	0.90 6	0.63 3	1.297	0.591	0.99 3	0.59 5	1.65 5	0.978	0.84 0	0.50 7	1.391	0.499
H-Waist	0.74 0	0.51 2	1.070	0.109	0.77 3	0.43 5	1.37 3	0.381	0.68 8	0.42 3	1.119	0.132
H-WHI	1.23 5	0.88 2	1.730	0.219	1.60 3	0.97 1	2.64 7	0.065	1.08 7	0.65 2	1.814	0.750
H-WHR	0.93 6	0.66 7	1.312	0.701	1.02 6	0.62 9	1.67 4	0.919	0.86 1	0.53 9	1.375	0.533
H-%BF	1.01 1	0.72 0	1.421	0.948	0.98 0	0.59 8	1.60 6	0.937	1.06 0	0.66 2	1.697	0.809
H-Insulin	0.77 4	0.45 6	1.314	0.343	0.50 1	0.23 6	1.06 2	0.069	1.30 6	0.60 3	2.828	0.499
H-Glucose	0.51 7	0.16 6	1.606	0.247	0.51 7	0.10 5	2.53 5	0.410	0.52 4	0.10 4	2.641	0.428
H-HOMA	0.67 8	0.39 9	1.152	0.150	0.40 3	0.18 4	0.88 1	0.020	1.23 4	0.57 9	2.629	0.587
H-Cholesterol	0.56 2	0.28 5	1.107	0.092	0.67 6	0.28 8	1.58 6	0.367	0.43 7	0.14 0	1.361	0.144
H-Triglycerides	0.69 2	0.45 1	1.062	0.091	0.82 4	0.46 7	1.45 5	0.507	0.57 0	0.29 3	1.109	0.096
L-HDL	1.22 9	0.87 1	1.734	0.241	1.23 8	0.71 3	2.14 9	0.450	1.17 5	0.74 2	1.859	0.494
H-LDL	0.84 8	0.37 4	1.922	0.694	0.75 5	0.25 8	2.20 7	0.608	1.06 7	0.29 5	3.861	0.922
rs3798721												
	Total				Men				Women			
Clinical marker	OR	95% CI		<i>p</i>-value	OR	95% CI		<i>p</i>-value	OR	95% CI		<i>p</i>-value
H-BMI	1.01 5	0.61 2	1.685	0.576	0.83 3	0.51 0	1.36 1	0.953	0.90 4	0.63 6	1.285	0.468
H-Waist	0.82 2	0.57 6	1.175	0.282	0.81 6	0.46 4	1.43 4	0.480	0.76 1	0.47 6	1.217	0.255
H-WHI	1.11 4	0.80 0	1.552	0.523	1.62 9	0.99 2	2.67 6	0.053	0.95 8	0.58 0	1.581	0.867
H-WHR	0.99 1	0.71 1	1.382	0.959	1.04 6	0.64 3	1.70 2	0.856	0.94 5	0.59 9	1.492	0.810
H-%BF	0.99 6	0.71 3	1.391	0.983	0.97 3	0.59 6	1.59 0	0.915	1.05 7	0.66 7	1.676	0.813
H-Insulin	0.88 6	0.53 0	1.480	0.644	0.52 4	0.24 7	1.11 5	0.091	1.75 2	0.81 7	3.759	0.148

H-Glucose	0.43 0	0.13 9	1.336	0.134	0.20 4	0.02 5	1.65 1	0.101	0.73 2	0.17 2	3.120	0.674
H-HOMA	0.69 2	0.41 5	1.156	0.159	0.38 1	0.17 4	0.83 3	0.013	1.41 9	0.67 3	2.992	0.358
H-Cholesterol	0.60 2	0.31 4	1.154	0.124	0.61 4	0.26 2	1.44 0	0.260	0.65 6	0.23 6	1.821	0.417
H-Triglycerides	0.74 2	0.49 0	1.123	0.158	0.89 2	0.51 0	1.56 2	0.691	0.64 6	0.34 5	1.209	0.171
L-HDL	1.21 4	0.86 5	1.703	0.263	1.13 5	0.65 4	1.97 1	0.653	1.13 6	0.72 5	1.780	0.579
H-LDL	0.83 4	0.37 5	1.853	0.655	0.68 9	0.23 6	2.01 3	0.495	1.23 9	0.35 1	4.369	0.740
rs16870899												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value			
H-BMI	1.27 4	0.56 7	2.862	0.558	1.17 0	0.37 2	3.67 8	0.789	1.38 2	0.44 0	4.342	0.580
H-Waist	0.51 9	0.19 3	1.398	0.188	0.24 3	0.03 1	1.90 2	0.146	0.75 8	0.22 8	2.521	0.652
H-WHI	0.48 7	0.20 2	1.177	0.104	0.43 9	0.14 0	1.37 6	0.149	0.45 7	0.09 9	2.104	0.305
H-WHR	0.82 2	0.36 7	1.844	0.635	1.14 3	0.37 4	3.49 0	0.815	0.57 7	0.17 4	1.918	0.366
H-%BF	1.13 2	0.50 7	2.525	0.762	1.07 3	0.35 1	3.27 9	0.902	1.17 7	0.37 1	3.737	0.783
H-Insulin	0.27 1	0.03 5	2.078	0.180	0.75 9	0.70 1	0.82 2	0.115	0.77 1	0.09 3	6.386	0.810
H-Glucose	1.39 3	0.17 8	10.92 2	0.752	2.78 1	0.32 1	24.0 64	0.334	0.97 3	0.95 5	0.992	0.551
H-HOMA	0.55 3	0.12 7	2.400	0.423	0.37 5	0.04 8	2.96 0	0.336	0.84 0	0.10 4	6.793	0.871
H-Cholesterol	0.45 8	0.06 1	3.459	0.439	0.73 5	0.09 2	5.86 7	0.772	0.94 0	0.91 3	0.967	0.363
H-Triglycerides	1.78 9	0.75 9	4.219	0.179	1.94 0	0.61 4	6.13 3	0.253	1.60 2	0.42 5	6.041	0.484
L-HDL	1.11 3	0.49 6	2.499	0.795	0.89 6	0.24 0	3.34 8	0.870	1.37 1	0.45 0	4.177	0.579
H-LDL	1.82 7	0.40 9	8.163	0.424	1.34 9	0.16 5	11.0 33	0.780	2.67 6	0.31 3	22.86 1	0.352
rs3798722												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value			
H-BMI	0.92 5	0.65 4	1.309	0.661	1.02 2	0.62 1	1.68 1	0.932	0.86 0	0.52 8	1.400	0.545
H-Waist	0.75 1	0.52 7	1.070	0.113	0.71 5	0.40 9	1.24 8	0.238	0.72 3	0.45 3	1.154	0.175
H-WHI	1.05 0	0.75 6	1.458	0.770	1.47 2	0.90 8	2.38 8	0.117	0.88 4	0.53 6	1.457	0.630
H-WHR	0.98 6	0.71 0	1.370	0.934	1.12 6	0.69 8	1.81 6	0.628	0.87 5	0.55 5	1.379	0.566
H-%BF	1.00 0	0.71 8	1.393	0.998	0.98 9	0.61 0	1.60 1	0.963	1.04 3	0.65 9	1.651	0.857

H-Insulin	0.74 9	0.44 9	1.251	0.270	0.42 2	0.19 9	0.89 4	0.022	1.54 3	0.72 0	3.307	0.265
H-Glucose	0.51 3	0.17 8	1.475	0.209	0.40 0	0.08 2	1.96 1	0.245	0.65 8	0.15 5	2.804	0.271
H-HOMA	0.63 3	0.38 1	1.052	0.076	0.35 7	0.16 8	0.75 9	0.006	1.27 3	0.60 4	2.682	0.527
H-Cholesterol	0.58 3	0.30 8	1.104	0.095	0.61 7	0.27 0	1.40 7	0.249	0.58 8	0.21 2	1.632	0.305
H-Triglycerides	0.89 3	0.59 6	1.337	0.582	1.06 8	0.62 0	1.84 1	0.813	0.77 0	0.41 8	1.420	0.404
L-HDL	1.21 5	0.86 8	1.700	0.257	1.06 8	0.62 0	1.84 1	0.813	1.21 3	0.77 6	1.898	0.398
H-LDL	1.00 3	0.46 1	2.182	0.994	0.77 1	0.27 7	2.14 8	0.620	1.69 1	0.46 8	6.116	0.420
rs9393903												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.86 5	0.60 3	1.240	0.430	0.84 1	0.49 8	1.41 7	0.516	0.90 4	0.54 9	1.490	0.694
H-Waist	0.75 5	0.52 2	1.091	0.134	0.65 0	0.35 9	1.17 9	0.155	0.78 1	0.48 3	1.262	0.314
H-WHI	1.21 0	0.86 4	1.697	0.268	1.52 3	0.91 7	2.52 8	0.104	1.17 4	0.70 7	1.950	0.536
H-WHR	0.93 3	0.66 5	1.310	0.691	0.96 4	0.58 6	1.58 3	0.884	0.90 8	0.57 0	1.446	0.686
H-%BF	1.01 5	0.72 2	1.427	0.934	0.88 5	0.53 6	1.46 0	0.633	1.17 8	0.73 8	1.882	0.493
H-Insulin	0.65 2	0.37 7	1.127	0.124	0.29 9	0.12 5	0.71 3	0.004	1.48 0	0.68 8	3.184	0.316
H-Glucose	0.36 5	0.10 4	1.286	0.103	0.23 9	0.03 0	1.94 3	0.148	0.51 3	0.10 2	2.582	0.411
H-HOMA	0.56 0	0.32 2	0.972	0.038	0.20 4	0.07 7	0.53 9	0.001	1.41 5	0.66 8	2.999	0.364
H-Cholesterol	0.59 4	0.30 1	1.173	0.130	0.73 2	0.31 1	1.71 9	0.474	0.46 3	0.14 7	1.454	0.179
H-Triglycerides	0.67 8	0.44 0	1.043	0.076	0.69 8	0.38 8	1.25 6	0.231	0.69 5	0.36 5	1.322	0.267
L-HDL	1.38 0	0.97 8	1.947	0.067	1.26 1	0.72 3	2.20 0	0.416	1.37 1	0.86 7	2.168	0.177
H-LDL	0.86 8	0.38 3	1.967	0.734	0.81 5	0.27 9	2.38 4	0.710	1.04 3	0.28 8	3.774	0.949
rs4532436												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.47 3	1.04 0	2.087	0.029	1.39 5	0.85 0	2.29 1	0.138	1.58 1	0.96 7	2.586	0.067
H-Waist	1.44 8	1.01 9	2.058	0.039	1.68 4	0.97 8	2.89 9	0.059	1.24 7	0.78 1	1.990	0.356
H-WHI	0.90 5	0.65 1	1.258	0.552	1.06 8	0.66 2	1.72 1	0.789	0.84 5	0.51 0	1.399	0.514
H-WHR	1.20 8	0.86 9	1.679	0.262	1.21 6	0.75 5	1.95 8	0.423	1.19 9	0.75 9	1.896	0.438

H-%BF	1.18 0	0.84 6	1.647	0.329	1.35 6	0.83 6	2.19 9	0.218	1.06 6	0.67 2	1.694	0.286
H-Insulin	2.24 8	1.35 7	3.722	0.001	2.92 4	1.47 6	5.79 2	0.002	1.67 0	0.77 8	3.584	0.187
H-Glucose	1.44 2	0.54 9	3.791	0.457	1.76 1	0.46 3	6.70 0	0.403	1.17 5	0.28 8	4.787	0.822
H-HOMA	2.02 5	1.23 7	3.315	0.004	2.71 0	1.39 5	5.26 7	0.003	1.48 6	0.70 3	3.143	0.299
H-Cholesterol	2.65 4	1.41 8	4.966	0.002	2.93 5	1.31 1	6.56 8	0.007	2.46 5	0.90 0	6.749	0.071
H-Triglycerides	1.14 3	0.76 7	1.705	0.512	1.33 2	0.77 8	2.27 9	0.297	0.99 6	0.54 2	1.830	0.990
L-HDL	0.86 4	0.61 5	1.213	0.398	0.80 5	0.46 4	1.39 5	0.441	0.83 4	0.53 1	1.310	0.432
H-LDL	1.38 6	0.64 0	3.003	0.406	2.06 5	0.76 3	5.59 1	0.147	0.77 4	0.21 4	2.798	0.696

rs12195587

Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	1.28 2	0.78 9	2.084	0.316	1.28 5	0.64 7	2.55 2	0.476	1.27 6	0.64 1	2.540	0.488
H- Waist	1.42 0	0.87 4	2.306	0.156	1.80 8	0.88 4	3.69 5	0.102	1.18 3	0.60 8	2.301	0.622
H-WHI	1.13 5	0.71 0	1.815	0.598	1.25 9	0.63 2	2.50 6	0.513	1.02 2	0.49 7	2.102	0.954
H-WHR	1.22 5	0.76 7	1.956	0.396	1.38 2	0.70 7	2.70 2	0.344	1.09 2	0.56 7	2.102	0.794
H-%BF	1.18 4	0.73 9	1.898	0.482	1.62 4	0.81 5	3.23 7	0.167	0.87 5	0.45 0	1.702	0.696
H-Insulin	1.26 8	0.64 9	2.479	0.488	1.47 7	0.62 6	3.48 7	0.374	0.94 0	0.30 4	2.906	0.915
H-Glucose	1.45 2	0.40 5	5.209	0.566	2.09 6	0.40 8	10.7 70	0.367	0.89 9	0.10 8	7.497	0.922
H-HOMA	1.61 8	0.85 1	3.077	0.139	1.62 7	0.68 0	3.89 3	0.273	1.64 4	0.62 7	4.305	0.309
H-Cholesterol	1.77 6	0.84 6	3.726	0.125	2.15 0	0.85 2	5.42 6	0.099	1.28 2	0.35 5	4.633	0.705
H-Triglycerides	1.00 9	0.56 7	1.794	0.976	1.14 4	0.53 9	2.42 7	0.727	0.83 7	0.33 3	2.107	0.707
L-HDL	0.95 3	0.58 5	1.552	0.847	0.98 4	0.45 5	2.12 8	0.967	0.93 9	0.48 9	1.806	0.852
H-LDL	0.76 9	0.22 6	2.614	0.674	1.33 8	0.36 7	4.88 1	0.660	0.96 2	0.94 0	0.985	0.202

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rs10748816

Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.91 0	0.61 9	1.338	0.632	0.92 5	0.54 4	1.57 3	0.776	0.91 7	0.52 3	1.611	0.765
H- Waist	1.12 6	0.75 8	1.673	0.556	1.16 2	0.64 3	2.10 2	0.620	1.01 2	0.58 8	1.741	0.967

H-WHI	0.57 8	0.40 1	0.832	0.003	0.50 8	0.29 8	0.86 6	0.012	0.75 1	0.42 6	1.324	0.323
H-WHR	0.80 4	0.55 8	1.158	0.241	0.89 6	0.53 9	1.49 0	0.674	0.71 3	0.42 0	1.209	0.209
H-%BF	1.01 8	0.70 4	1.471	0.926	1.05 9	0.63 4	1.77 1	0.827	1.01 4	0.59 5	1.729	0.958
H-Insulin	1.33 3	0.74 0	2.401	0.339	1.75 0	0.80 3	3.81 4	0.157	1.04 2	0.42 1	2.579	0.929
H-Glucose	1.22 7	0.39 4	3.820	0.724	1.54 9	0.31 5	7.61 4	0.589	0.96 9	0.19 2	4.907	0.970
H-HOMA	1.23 0	0.69 1	2.191	0.482	1.31 3	0.62 5	2.75 6	0.474	1.26 5	0.49 6	3.224	0.624
H-Cholesterol	1.64 2	0.77 6	3.476	0.192	1.42 1	0.58 3	3.46 1	0.440	2.70 3	0.60 7	12.03 5	0.176
H-Triglycerides	0.81 7	0.52 8	1.265	0.366	0.81 2	0.45 8	1.43 9	0.477	0.90 6	0.45 3	1.810	0.780
L-HDL	0.82 5	0.56 9	1.196	0.311	0.74 6	0.42 2	1.31 8	0.313	0.76 6	0.45 6	1.286	0.315
H-LDL	1.68 7	0.62 8	4.533	0.295	1.05 2	0.35 9	3.08 4	0.926	1.04 4	1.01 7	1.073	0.068
rs36103207												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.39 7	0.08 6	1.829	0.221	0.45 9	0.05 1	4.16 5	0.480	0.35 6	0.04 2	3.002	0.324
H- Waist												
H-WHI	0.67 5	0.20 1	2.268	0.524	0.48 0	0.07 9	2.91 6	0.417	1.03 3	0.19 7	5.429	0.969
H-WHR	0.94 7	0.29 7	3.018	0.926	0.32 6	0.03 6	2.95 2	0.296	1.79 5	0.39 5	8.163	0.444
H-%BF	0.64 3	0.20 8	1.990	0.441	0.22 4	0.02 5	2.02 8	0.147	1.17 4	0.28 8	4.787	0.826
H-Insulin	0.81 4	0.77 8	0.853	0.179	0.76 5	0.70 8	0.82 7	0.341	0.85 8	0.81 3	0.906	0.367
H-Glucose	0.97 1	0.95 7	0.985	0.534	0.96 8	0.94 8	0.98 9	0.687	0.97 4	0.95 6	0.992	0.643
H-HOMA	0.85 8	0.82 9	0.888	0.160	0.82 1	0.77 5	0.87 0	0.353	0.89 1	0.85 6	0.928	0.326
H-Cholesterol	0.97 8	0.12 4	7.691	0.983	2.27 7	0.24 6	21.0 85	0.458	0.94 1	0.91 4	0.968	0.479
H-Triglycerides	0.32 0	0.04 1	2.487	0.252	0.74 6	0.08 2	6.78 9	0.795	0.83 5	0.79 4	0.878	0.211
L-HDL	1.11 1	0.35 9	3.439	0.856	0.74 6	0.08 2	6.78 9	0.795	1.16 4	0.28 6	4.741	0.832
H-LDL	1.79 5	0.22 5	14.33 2	0.577	4.17 2	0.44 0	39.5 27	0.178	0.96 7	0.94 7	0.987	0.603
ELOVL4												
	rs3812153											
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value

H-BMI	0.74 1	0.50 6	1.085	0.123	0.69 5	0.40 4	1.19 6	0.189	0.78 7	0.46 0	1.347	0.384
H- Waist	0.86 2	0.58 9	1.261	0.444	0.83 0	0.45 9	1.49 9	0.537	0.88 5	0.53 4	1.467	0.636
H-WHI	0.94 5	0.66 4	1.345	0.754	0.91 4	0.55 1	1.51 6	0.729	0.96 1	0.55 9	1.650	0.885
H-WHR	0.90 1	0.63 3	1.283	0.565	0.79 5	0.47 8	1.32 5	0.381	1.01 2	0.62 1	1.652	0.961
H-%BF	0.90 8	0.63 6	1.295	0.594	0.93 2	0.56 0	1.55 3	0.789	0.88 2	0.53 7	1.450	0.623
H-Insulin	0.63 5	0.35 8	1.127	0.119	0.51 9	0.23 9	1.12 7	0.095	0.79 0	0.33 4	1.868	0.593
H-Glucose	1.21 5	0.44 3	3.337	0.706	2.83 8	0.74 4	10.8 32	0.113	0.31 3	0.03 8	2.578	0.256
H-HOMA	0.63 3	0.36 0	1.111	0.109	0.56 7	0.26 6	1.21 2	0.141	0.72 4	0.31 1	1.686	0.455
H-Cholesterol	1.15 7	0.61 6	2.172	0.651	1.38 5	0.62 5	3.06 8	0.423	0.85 4	0.29 6	2.466	0.771
H-Triglycerides	0.91 0	0.58 9	1.405	0.670	0.66 2	0.36 2	1.21 1	0.180	1.32 0	0.69 9	2.491	0.393
L-HDL	1.09 9	0.76 8	1.574	0.605	1.12 9	0.63 9	1.99 5	0.678	1.09 8	0.67 8	1.779	0.704
H-LDL	1.82 5	0.83 7	3.981	0.126	2.03 8	0.75 9	5.46 8	0.151	1.51 4	0.41 7	5.495	0.527
rs117891930												
	Total				Men				Women			
Clinical marker	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
H-BMI	1.15 8	0.47 7	2.81	0.746	0.68 8	0.17 8	2.65 2	0.586	1.86 1	0.55 4	6.257	0.31
H- Waist	1.57 5	0.66 1	3.752	0.303	1.14 7	0.29 6	4.44 6	0.843	2.13 1	0.63 5	7.147	0.212
H-WHI	0.94	0.39 6	2.235	0.889	0.87	0.25 9	2.91 9	0.822	0.96 7	0.25	3.733	0.961
H-WHR	1.11	0.47 2	2.611	0.811	0.74 9	0.21 4	2.61 8	0.651	1.62 2	0.48 4	5.436	0.43
H-%BF	0.68 4	0.27 5	1.699	0.411	0.25 2	0.05 1	1.23 3	0.068	1.42 2	0.42 4	4.765	0.568
H-Insulin	1.93 3	0.66	5.657	0.222	0.94 8	0.19	4.73	0.948	4.02 9	0.91 2	17.79 3	0.049
H-Glucose	3.74 7	0.80 2	17.5	0.072	3.36 3	0.38 3	29.5 26	0.248	4.18 6	0.46 9	37.32 7	0.165
H-HOMA	3.58 2	1.38 1	9.29	0.005	3.31 7	0.89 6	12.2 8	0.059	3.90 3	0.95 5	15.95	0.042
H-Cholesterol	1.18 2	0.26 8	5.22	0.825	0.88 9	0.11	7.20 7	0.913	1.66 5	0.20 1	13.77 3	0.634
H-Triglycerides	1.49	0.57 1	3.893	0.413	1.75 6	0.49 9	6.18 3	0.377	1.16 7	0.24 4	5.568	0.847
L-HDL	0.65 5	0.25 3	1.7	0.383	0.65 7	0.13 9	3.11 5	0.596	0.65 3	0.18 7	2.278	0.502
H-LDL	1.00 9	0.13 1	7.794	0.993	0.93 9	0.91 1	0.96 7	0.399	3.23 3	0.37 3	28.03 7	0.262
rs80246554												
	Total				Men				Women			

Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	0.96 5	0.47 4	1.965	0.923	0.59 9	0.21 1	1.70 1	0.333	1.56 7	0.57 8	4.251	0.376
H- Waist	1.07 7	0.52 9	2.194	0.838	0.74 6	0.24 1	2.31	0.612	1.57 5	0.59	4.204	0.363
H-WHI	1.31 2	0.67 4	2.554	0.424	0.88 3	0.35 4	2.20 3	0.791	1.87 8	0.69 1	5.105	0.211
H-WHR	1.01 2	0.51 7	1.98	0.973	0.87 5	0.34 6	2.21 2	0.779	1.19 2	0.44 7	3.179	0.726
H-%BF	0.71 3	0.35 3	1.441	0.345	0.47 8	0.17 2	1.33 2	0.151	1.04 2	0.39 1	2.779	0.935
H-Insulin	2.24 4	0.93 1	5.407	0.066	1.36 2	0.40 6	4.56 5	0.618	3.93 7	1.08	14.34 5	0.027
H-Glucose	2.08 4	0.45 8	9.475	0.332	1.71 1	0.20 3	14.4	0.619	2.56 3	0.29 7	22.10 7	0.377
H-HOMA	2.62 2	1.16 4	5.908	0.016	2.26 1	0.74 5	6.86 4	0.142	3.08 6	0.93	10.23 9	0.054
H-Cholesterol	1.03 9	0.30 7	3.518	0.951	0.45 1	0.05 8	3.49 9	0.437	2.31 7	0.48 7	11.01 4	0.279
H-Triglycerides	1.48 8	0.7	3.164	0.3	1.68 2	0.64 4	4.39 4	0.286	1.12 6	0.31 1	4.072	0.857
L-HDL	0.84 2	0.41 4	1.712	0.636	0.73 5	0.23 8	2.27 5	0.594	1.03 3	0.38 8	2.75	0.949
H-LDL	1.22 7	0.27 9	5.394	0.786	0.93 7	0.90 8	0.96 6	0.247	4.76 7	0.93	24.43	0.04
rs12196014												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	0.93	0.57 1	1.515	0.772	0.79 3	0.4 3	1.57 3	0.508	1.09 1	0.54 4	2.188	0.807
H- Waist	0.88 2	0.53 8	1.448	0.621	0.91 7	0.43 8	1.91 9	0.818	0.89 5	0.45 5	1.761	0.749
H-WHI	1.08 8	0.69 1	1.712	0.717	0.98 2	0.52	1.85 3	0.955	1.09 9	0.54 2	2.226	0.795
H-WHR	0.99 1	0.62 6	1.569	0.97	1.13 4	0.6 5	2.14 5	0.699	0.85 9	0.44 2	1.671	0.656
H-%BF	0.76 9	0.48	1.232	0.275	0.62 8	0.32 5	1.21 7	0.167	0.93 5	0.47 7	1.832	0.846
H-Insulin	1.51 9	0.79 7	2.896	0.202	1.49 5	0.65 2	3.42 8	0.343	1.38 9	0.48 4	3.988	0.542
H-Glucose	1.15 3	0.32 4	4.095	0.826	0.60 1	0.07 3	4.91 9	0.633	2.00 8	0.39 2	10.29 1	0.396
H-HOMA	1.59 1	0.85	2.98	0.144	1.78 7	0.79 5	4.01 5	0.157	1.28 6	0.46	3.593	0.632
H-Cholesterol	0.81 1	0.33 3	1.977	0.646	0.58 2	0.16 8	2.02	0.391	1.19	0.33	4.297	0.791
H-Triglycerides	1.56 2	0.92 9	2.628	0.091	1.97 8	1.01 1	3.87 1	0.044	1.03 5	0.43 1	2.489	0.938
L-HDL	1.06 3	0.66 6	1.696	0.8	0.94 4	0.45 1	1.97 7	0.879	1.27 7	0.66 9	2.44	0.459
H-LDL	0.41 5	0.09 7	1.786	0.224	0.92 6	0.89 2	0.96	0.054	1.49 4	0.30 6	7.285	0.619
rs9448863												

Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.76 1	0.52 1.112	0.158	0.71 2	0.41 4	1.22 6	0.221	0.81 2	0.47 7	1.382	0.443	
H- Waist	0.88 5	0.60 1.293	0.527	0.84 8	0.46 9	1.53 2	0.586	0.90 2	0.54 6	1.489	0.687	
H-WHI	0.90 3	0.63 1.284	0.57	0.88 8	0.53 5	1.47 4	0.648	0.92 2	0.53 7	1.581	0.768	
H-WHR	0.91 8	0.64 1.306	0.636	0.81 8	0.49 1	1.36 4	0.442	1.02 1	0.62 8	1.661	0.933	
H-%BF	0.92 3	0.64 1.316	0.66	0.96 6	0.57 9	1.61 2	0.895	0.88 8	0.54 2	1.455	0.639	
H-Insulin	0.57 4	0.32 1.029	0.06	0.45 4	0.20 4	1.01 2	0.05	0.75 3	0.31 9	1.778	0.518	
H-Glucose	1.20 5	0.43 3.31	0.717	2.88 7	0.75 6	11.0 19	0.106	0.30 3	0.03 7	2.5	0.242	
H-HOMA	0.57 6	0.32 1.022	0.057	0.49 6	0.22 6	1.08 8	0.077	0.7	0.30 1	1.628	0.407	
H-Cholesterol	1.14 7	0.61 2.153	0.67	1.41	0.63 6	3.12 5	0.397	0.82 7	0.28 6	2.388	0.726	
H-Triglycerides	0.90 1	0.58 1.391	0.639	0.67 6	0.36 9	1.23 7	0.204	1.27 3	0.67 5	2.401	0.457	
L-HDL	1.05	0.73 3	1.504	0.79	1.06	0.59 7	1.88 1	0.844	1.03 8	0.64 3	1.677	0.879
H-LDL	1.81	0.83 3.948	0.131	2.07 4	0.77 3	5.56 7	0.141	1.46 8	0.40 5	5.325	0.558	
rs16891339												
Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.36 7	0.10 1.276	0.101	0.19 7	0.02 5	1.58	0.09	0.61 4	0.12 5	3.015	0.546	
H- Waist	0.58 5	0.19 1.788	0.343	0.74 3	0.69 3	0.79 6	0.065	1.39 4	0.36 7	5.303	0.625	
H-WHI	1.23	0.49 2	3.072	0.658	0.71 4	0.20 2	2.52 4	0.601	2.11 7	0.55 5	8.078	0.264
H-WHR	0.96 1	0.38 2.425	0.933	0.55 4	0.14	2.18 6	0.394	1.68 7	0.44 4	6.408	0.44	
H-%BF	0.46 7	0.17 1.245	0.12	0.37 7	0.09 5	1.48 9	0.15	0.57 5	0.14 1	2.345	0.437	
H-Insulin	0.89 3	0.19 4.162	0.886	0.54 1	0.06 3	4.61 1	0.571	1.57 5	0.17 3	14.57	0.688	
H-Glucose	0.97 1	0.95 0.984	0.449	0.96 8	0.94 7	0.98 9	0.564	0.97 4	0.95 6	0.992	0.622	
H-HOMA	0.88 2	0.19 3.961	0.87	0.57 1	0.07	4.68 3	0.599	1.42 2	0.16 6	12.21 6	0.748	
H-Cholesterol	0.91 9	0.89 0.941	0.196	0.89 5	0.86	0.93 2	0.282	0.94	0.91 4	0.967	0.452	
H-Triglycerides	0.72 5	0.20 2.528	0.613	0.32 2	0.04	2.59	0.264	1.51 2	0.30 5	7.499	0.612	
L-HDL	0.81 1	0.30 2.165	0.676	0.32 2	0.04	2.59	0.264	1.46 6	0.38 6	5.565	0.574	
H-LDL	0.95 3	0.93 0.971	0.336	0.93 9	0.91 1	0.96 7	0.421	0.96 7	0.94 7	0.987	0.58	

ELOVL5

rs41273878												
Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.89 4	0.27 2	2.939	0.853	0.73 8	0.14 1	3.87 6	0.72	1.09 1	0.19 6	6.065	0.921
H- Waist	0.66 5	0.18 1	2.444	0.537	0.5	0.05 9	4.22 5	0.518	0.86	0.15 5	4.773	0.864
H-WHI	0.84 8	0.27 4	2.622	0.774	0.97 1	0.21 3	4.42 1	0.97	0.51 1	0.05 9	4.435	0.536
H-WHR	0.82 6	0.26 7	2.555	0.74	0.52 2	0.1	2.73 8	0.437	1.33 6	0.26 5	6.728	0.726
H-%BF	0.88 8	0.29 5	2.677	0.834	0.35 8	0.06 8	1.87 6	0.207	2.37 9	0.42 9	13.19 3	0.309
H-Insulin	0.81 5	0.77 8	0.853	0.209	0.76 4	0.70 7	0.82 6	0.27	0.86	0.81 5	0.907	0.487
H-Glucose	0.97 1	0.95 7	0.985	0.534	0.96 8	0.94 8	0.98 9	0.632	0.97 4	0.95 6	0.992	0.689
H-HOMA	0.85 8	0.82 9	0.888	0.16	0.81 9	0.77 2	0.86 8	0.216	0.89 2	0.85 7	0.929	0.44
H-Cholesterol	0.97 8	0.12 4	7.691	0.983	1.50 6	0.17 5	12.9 63	0.709	0.94 1	0.91 5	0.968	0.541
H-Triglycerides	2.50 5	0.80 5	7.799	0.102	4.17 6	0.91 2	19.1 27	0.047	1.04 5	0.11 9	9.139	0.968
L-HDL	1.11 1	0.35 9	3.439	0.856	0.49 3	0.05 8	4.16 5	0.509	2.35 7	0.42 5	13.06 2	0.314
H-LDL	1.79 5	0.22 5	14.33 2	0.577	2.76	0.31 3	24.3 29	0.342	0.96 7	0.94 7	0.987	0.653

rs72938776												
Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	12.4 47	1.48 8	104.1 27	0.003	0.34 3	0.29 2	0.40 3	0.018	6.71 7	0.69	65.44 3	0.059
H- Waist	3.02 2	0.67	13.64 2	0.132	6.23 2	0.55 7	69.7 84	0.091	1.73 9	0.24 2	12.51 6	0.58
H-WHI	1.02 1	0.22 7	4.603	0.978	1.46 3	0.13 1	16.3 26	0.757	0.85 9	0.08 8	8.371	0.896
H-WHR	8.12 9	0.97 2	67.95 1	0.022	2.67 8	0.24	29.8 72	0.407	0.42 2	0.37	0.482	0.02
H-%BF	6.35	0.76	53.08 8	0.051	1.84 5	0.16 5	20.5 88	0.615	0.45 4	0.4	0.515	0.029
H-Insulin	6.97 3	1.14 5	42.46 9	0.015	0.22 3	0.17 2	0.29	0.009	3.18 3	0.28	36.2	0.327
H-Glucose	0.97 1	0.95 8	0.985	0.65	0.96 8	0.94 8	0.98 9	0.756	0.97 4	0.95 6	0.992	0.745
H-HOMA	1.24 5	0.14 3	10.80 7	0.842	2.36 4	0.21	26.6 45	0.475	0.89 3	0.85 8	0.929	0.551
H-Cholesterol	1.97 8	0.23 3	16.78 5	0.525	0.89 8	0.86 4	0.93 4	0.562	5.68 6	0.56 1	57.59 7	0.098
H-Triglycerides	1.57 3	0.30 2	8.209	0.588	1.50 7	0.13 5	16.8 71	0.739	1.75 5	0.17 9	17.22 2	0.626

L-HDL	2.39	0.53	10.77 9	0.243	6.14 3	0.54 9	68.7 76	0.094	1.16 2	0.16 2	8.355	0.882
H-LDL	3.62 8	0.42 1	31.24 7	0.21	0.94	0.91 3	0.96 8	0.664	11.0 37	1.04 4	116.6 96	0.013
rs36054518												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.76 7	0.27	2.184	0.619	0.52 1	0.10 6	2.55 9	0.416	1.08 7	0.26 6	4.442	0.908
H- Waist	0.62 9	0.20 4	1.936	0.416	0.74 5	0.69 5	0.79 8	0.081	1.38 7	0.36 5	5.275	0.631
H-WHI	0.86	0.32 9	2.25	0.758	0.57 3	0.15 1	2.17 9	0.41	1.29 5	0.31 7	5.299	0.719
H-WHR	0.83 7	0.32	2.191	0.718	0.36 8	0.07 5	1.80 5	0.202	1.67 7	0.44 1	6.37	0.445
H-%BF	1.04 4	0.40 8	2.671	0.928	0.44 7	0.10 9	1.82 4	0.252	2.41 9	0.59 3	9.861	0.206
H-Insulin	2.30 8	0.67 7	7.87	0.171	3.43 2	0.47	25.0 68	0.199	2.13 8	0.41 2	11.10 4	0.358
H-Glucose	0.97 1	0.95 7	0.985	0.462	0.96 8	0.94 7	0.98 9	0.586	0.97 3	0.95 5	0.992	0.622
H-HOMA	1.24 9	0.35 3	4.422	0.73	0.57 4	0.07	4.70 6	0.602	2.50 2	0.49 6	12.61 7	0.252
H-Cholesterol	0.69 9	0.09 1	5.376	0.73	0.89 6	0.86 1	0.93 3	0.309	2.22 7	0.26 2	18.90 5	0.453
H-Triglycerides	0.22 3	0.02 9	1.693	0.113	0.74 2	0.69 2	0.79 5	0.079	0.64 3	0.07 9	5.256	0.679
L-HDL	1.13 8	0.43 5	2.98	0.793	0.85 3	0.17 3	4.20 3	0.846	1.47 6	0.38 9	5.606	0.566
H-LDL	2.89 6	0.63	13.31 6	0.0154	0.93 9	0.91 1	0.96 8	0.447	12	2.10 4	68.44 2	0
rs72940713												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	7.32	1.50 6	35.57 9	0.004	0.34 1	0.28 9	0.40 1	0.006	3.37 9	0.55 5	20.56 9	0.163
H- Waist	2.83 5	0.75 2	10.68 2	0.108	3.10 1	0.42 9	22.4 33	0.24	2.61 8	0.43 1	15.91	0.28
H-WHI	1.08 7	0.28 9	4.09	0.902	2.20 9	0.22 7	21.4 94	0.486	0.63 8	0.07	5.792	0.689
H-WHR	4.76 6	0.98 2	23.14 1	0.033	4.05	0.41 6	39.4 16	0.194	5.49 2	0.60 7	49.73	0.09
H-%BF	8.56 1	1.06 4	68.89 9	0.016	2.78 7	0.28 6	27.1 31	0.359	0.45	0.39 6	0.511	0.014
H-Insulin	6.95 3	1.14 2	42.34 6	0.015	0.22 3	0.17 2	0.29	0.009	3.16 7	0.27 8	36.01 1	0.33
H-Glucose	0.97 1	0.95 8	0.985	0.606	0.96 8	0.94 8	0.98 9	0.719	0.97 4	0.95 6	0.992	0.715
H-HOMA	1.24 3	0.14 3	10.78 4	0.844	2.36 4	0.21	26.6 45	0.475	0.89 3	0.85 8	0.929	0.55
H-Cholesterol	1.47 6	0.18 1	12.05 6	0.715	0.89 8	0.86 3	0.93 4	0.502	4.23 5	0.44 9	39.99 3	0.172

H-Triglycerides	1.97 5	0.48 7	8.012	0.333	1	0.10 2	9.76 7	1	3.56 9	0.58 1	21.93 2	0.144
L-HDL	1.43 3	0.38 1	5.395	0.593	3.05 7	0.42 3	22.1 08	0.246	0.77 5	0.12 8	4.706	0.782
H-LDL	0.95 6	0.93 9	0.973	0.52	0.94	0.91 3	0.96 8	0.615	0.97	0.95 2	0.99	0.698
rs114271869												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.89 6	0.27 2	2.947	0.857	1.11 3	0.26	4.75 6	0.886	0.54 6	0.06	4.95	0.586
H- Waist	0.99 6	0.30 3	3.276	0.994	1.01	0.19 9	5.11 9	0.991	1.16 4	0.19 1	7.071	0.87
H-WHI	1.17 2	0.38 9	3.531	0.778	0.72 7	0.17 8	2.96 5	0.656	1.73	0.28 4	10.53 8	0.549
H-WHR	0.83 2	0.26 9	2.576	0.751	0.79 7	0.18 7	3.4	0.759	0.89 1	0.14 7	5.408	0.9
H-%BF	0.64 8	0.20 9	2.005	0.449	0.54 4	0.12 7	2.32 4	0.407	0.78 2	0.12 9	4.75	0.79
H-Insulin	0.64 4	0.07 8	5.311	0.681	0.65 3	0.07 4	5.73 8	0.701	0.86 4	0.82	0.911	0.577
H-Glucose	0.97 1	0.95 7	0.985	0.533	0.96 8	0.94 7	0.98 9	0.607	0.97 4	0.95 6	0.992	0.715
H-HOMA	0.86	0.83 1	0.89	0.163	0.81 8	0.77 1	0.86 7	0.215	0.89 5	0.86 1	0.932	0.447
H-Cholesterol	0.92	0.89 8	0.942	0.287	0.89 6	0.86 1	0.93 3	0.338	0.94 1	0.91 5	0.968	0.577
H-Triglycerides	1.17 2	0.31 8	4.327	0.812	0.99 5	0.19 6	5.04 4	0.995	1.30 6	0.14 3	11.93 6	0.813
L-HDL	2.91 4	0.94 1	9.022	0.053	5.27 4	1.22 8	22.6 51	0.013	1.76 8	0.29 1	10.73	0.532
H-LDL	0.95 4	0.93 7	0.971	0.428	0.93 9	0.91 1	0.96 8	0.473	0.96 7	0.94 7	0.987	0.682
rs 2073040												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.96	0.65 4	1.409	0.837	1.26 9	0.72 9	2.20 8	0.402	0.73 4	0.43	1.252	0.257
H- Waist	0.84 6	0.57 7	1.24	0.393	0.91 8	0.50 8	1.65 9	0.778	0.79 8	0.47 8	1.332	0.389
H-WHI	0.88	0.61 2	1.264	0.489	0.95 5	0.56 5	1.61 5	0.865	0.76 7	0.44 5	1.321	0.339
H-WHR	0.88 6	0.61 6	1.274	0.513	1.06 6	0.63 2	1.79 8	0.813	0.74 5	0.44 9	1.235	0.254
H-%BF	0.88 6	0.61 2	1.281	0.52	1.02 1	0.60 3	1.72 9	0.937	0.77 3	0.46	1.298	0.331
H-Insulin	1.27 5	0.72 2	2.252	0.403	0.86 9	0.41 5	1.82 1	0.712	2.01 7	0.78 6	5.174	0.139
H-Glucose	1.30 6	0.42	4.066	0.644	0.78 2	0.19 1	3.20 4	0.733	2.88 8	0.35	23.83 5	0.305
H-HOMA	1.10 1	0.63 6	1.908	0.732	1.16 2	0.55 1	2.45	0.695	0.99 7	0.43 8	2.268	0.994

H-Cholesterol	1.75 4	0.82 8	3.713	0.138	1.57 6	0.61 7	4.02 8	0.34	2.09 6	0.59 1	7.432	0.244
H-Triglycerides	0.79 9	0.51 9	1.232	0.311	0.78 9	0.44 1	1.41	0.424	0.80 2	0.41 5	1.548	0.512
L-HDL	0.68 6	0.47 5	0.992	0.045	0.60 9	0.34 4	1.07 8	0.088	0.73 4	0.44 4	1.212	0.227
H-LDL	1.08 7	0.44 8	2.636	0.854	1.3	0.41 1	4.11 3	0.656	0.80 2	0.19 6	3.282	0.759
rs 9370194												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value
H-BMI	0.93 4	0.63 1	1.383	0.735	0.72	0.41 7	1.24 4	0.24	1.21 7	0.69 1	2.142	0.498
H- Waist	0.75 1	0.50 1	1.127	0.166	0.74 1	0.40 2	1.36 4	0.337	0.82 4	0.47 3	1.433	0.494
H-WHI	0.91 3	0.63 1	1.321	0.629	0.98 6	0.59 1	1.64 6	0.958	0.62 2	0.33 4	1.161	0.135
H-WHR	0.79 4	0.54 7	1.152	0.225	0.73 1	0.43 5	1.22 7	0.236	0.87 3	0.50 9	1.496	0.622
H-%BF	0.79	0.54 3	1.15	0.219	0.53 7	0.31 9	0.90 7	0.019	1.16 3	0.67 3	2.01	0.589
H-Insulin	1.46 3	0.84 8	2.524	0.17	1.58 6	0.77 8	3.23 4	0.205	1.19 3	0.49 7	2.86	0.695
H-Glucose	0.78 8	0.25 3	2.453	0.681	1.09 4	0.26 7	4.47 9	0.901	0.42 9	0.05 2	3.543	0.42
H-HOMA	1.12 6	0.65 6	1.931	0.667	0.83 4	0.40 2	1.72 7	0.626	1.53 3	0.68 4	3.439	0.298
H-Cholesterol	1.01 7	0.52 1	1.986	0.961	0.42 2	0.15 5	1.14 5	0.083	2.92 6	1.08 5	7.892	0.027
H-Triglycerides	1.07 8	0.69 2	1.681	0.739	0.89	0.49 5	1.6	0.699	1.27 5	0.64 2	2.529	0.489
L-HDL	1.16	0.79 7	1.687	0.439	1.25 9	0.71 3	2.22 6	0.429	1.28 8	0.75 9	2.187	0.35
H-LDL	0.89 8	0.37 2	2.166	0.811	0.27 4	0.06 1	1.22 7	0.072	3.20 6	0.90 1	11.40 6	0.059
ELOVL6												
	rs11098065											
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value
H-BMI	0.90 3	0.63 6	1.282	0.57	1.05 1	0.64 6	1.72 6	0.844	0.77 8	0.47 3	1.279	0.323
H- Waist	1.04 7	0.73 7	1.489	0.798	1.08 8	0.63 3	1.87 2	0.76	1.01 8	0.63 7	1.627	0.942
H-WHI	1.15 8	0.83 3	1.61	0.384	1.09 4	0.67 9	1.76 3	0.712	1.27 5	0.77 3	2.106	0.343
H-WHR	1.06	0.76 2	1.475	0.73	1.12 6	0.70 1	1.81 1	0.624	1.00 1	0.63 2	1.585	0.996
H-%BF	0.90 1	0.64 6	1.257	0.541	1.24 4	0.76 8	2.01 7	0.376	0.67 2	0.42 2	1.071	0.095
H-Insulin	0.49 9	0.28 9	0.861	0.011	0.43 6	0.21 6	0.90 6	0.024	0.57 8	0.25 3	1.321	0.191

H-Glucose	0.55 8	0.19 4	1.604	0.273	0.67 4	0.16 5	2.74 9	0.581	0.44 4	0.08 8	2.233	0.313
H-HOMA	0.72 5	0.43 8	1.2	0.21	0.65 6	0.33 3	1.29 1	0.222	0.83 3	0.38 8	1.786	0.639
H-Cholesterol	1.21 5	0.66 9	2.209	0.523	1.78 2	0.82 3	3.85 9	0.14	0.66 3	0.24 2	1.814	0.422
H-Triglycerides	0.93	0.62 1	1.394	0.727	1.12 4	0.65 6	1.92 5	0.673	0.72 5	0.38 7	1.358	0.316
L-HDL	0.68 6	0.48 7	0.966	0.031	0.82 8	0.48	1.42 9	0.499	0.58 2	0.36 9	0.919	0.02
H-LDL	1.09 2	0.50 2	2.375	0.824	1.22 7	0.45 9	3.27 8	0.684	0.90 1	0.24 9	3.259	0.874
rs17041284												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.49 4	0.59 1	3.777	0.394	1.57 8	0.46 9	5.30 7	0.459	1.33 2	0.31 2	5.693	0.699
H-Waist	1.52	0.61 1	3.784	0.366	1.78 3	0.50 6	6.27 7	0.364	1.40 7	0.37	5.353	0.616
H-WHI	1.38 2	0.56 6	3.372	0.477	0.87	0.25 9	2.91 9	0.822	2.14 3	0.56 2	8.179	0.256
H-WHR	1.20 6	0.48 3	3.014	0.688	1.10 9	0.33	3.72	0.868	1.34 9	0.33 1	5.498	0.676
H-%BF	0.93 7	0.37 5	2.341	0.889	0.75 5	0.22 5	2.53 6	0.65	1.18 3	0.29	4.824	0.815
H-Insulin	1.14 4	0.31 5	4.156	0.839	0.82 4	0.16 9	4.02 3	0.812	1.62 9	0.17 6	15.09	0.666
H-Glucose	1.84 9	0.23 3	14.67 1	0.056	3.36 3	0.38 3	29.5 26	0.248	0.97 3	0.95 5	0.992	0.622
H-HOMA	0.78 1	0.17 6	3.467	0.745	0.45 5	0.05 7	3.64 3	0.449	1.47 1	0.17 1	12.65	0.725
H-Cholesterol	1.31 6	0.29 6	5.852	0.718	2.05 8	0.42 3	10.0 17	0.364	0.94	0.91 4	0.967	0.451
H-Triglycerides	2.19 2	0.85 5	5.618	0.095	2.61 2	0.77 2	8.83 2	0.111	1.54 4	0.31 1	7.663	0.594
L-HDL	1.19 5	0.48 1	2.97	0.702	0.65 7	0.13 9	3.11 5	0.596	2.39 4	0.58 8	9.751	0.211
H-LDL	1.11 7	0.14 4	8.671	0.916	1.63 1	0.19 6	13.5 45	0.649	0.96 7	0.94 7	0.987	0.58
rs7662161												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.90 3	0.63 6	1.283	0.569	0.87 5	0.53 2	1.44	0.601	0.93	0.56 7	1.526	0.776
H-Waist	0.94 6	0.66 4	1.348	0.758	0.60 5	0.34 4	1.06 5	0.081	1.30 5	0.81 6	2.088	0.268
H-WHI	1.08 1	0.77 6	1.504	0.646	0.93 8	0.58 3	1.51 1	0.794	1.27 8	0.77 3	2.114	0.34
H-WHR	0.97 8	0.70 2	1.362	0.894	0.84 1	0.52 2	1.35 6	0.479	1.12 5	0.71	1.784	0.617
H-%BF	0.77 8	0.55 7	1.087	0.142	0.8	0.49 5	1.29 2	0.362	0.75	0.46 9	1.199	0.23

H-Insulin	0.76 7	0.46 2	1.274	0.306	0.76 4	0.38 7	1.50 7	0.439	0.78 6	0.36 1	1.708	0.544
H-Glucose	0.78 4	0.28 6	2.149	0.636	0.70 9	0.17 4	2.89 2	0.631	0.87 3	0.20 5	3.721	0.855
H-HOMA	0.75 7	0.45 7	1.253	0.279	0.73	0.37 4	1.42 4	0.356	0.77 9	0.35 9	1.693	0.529
H-Cholesterol	0.59	0.30 9	1.128	0.108	0.34	0.13 4	0.86 3	0.018	1.18	0.45 2	3.077	0.736
H-Triglycerides	0.81 1	0.53 8	1.222	0.316	0.81 8	0.47 2	1.41 5	0.473	0.79 2	0.42 3	1.483	0.467
L-HDL	0.91 7	0.65 2	1.289	0.619	0.81 8	0.47 2	1.41 5	0.473	0.99 3	0.63	1.565	0.977
H-LDL	0.33 1	0.12 3	0.89	0.022	0.17 7	0.04	0.78 9	0.011	0.72 4	0.17 8	2.948	0.652
77958351												
	Total				Men				Women			
Clinical marker	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value			
H-BMI	1.58 9	0.58 3	4.332	0.363	1.50 7	0.39 5	5.74 6	0.547	1.65 5	0.36 3	7.544	0.513
H- Waist	1.58 6	0.59 4	4.234	0.354	1.54 4	0.37 6	6.34 1	0.545	1.75 2	0.43	7.147	0.43
H-WHI	1.55 1	0.59	4.077	0.371	0.90 8	0.23 9	3.45 6	0.888	2.65 9	0.65	10.87 8	0.159
H-WHR	1.33 7	0.49 5	3.613	0.566	1.06 2	0.27 9	4.04 1	0.93	1.79 5	0.39 5	8.163	0.444
H-%BF	1.04	0.38 5	2.811	0.938	0.72 6	0.19 1	2.76 2	0.638	1.57 6	0.34 6	7.167	0.555
H-Insulin	0.74 2	0.16 3	3.386	0.7	0.40 3	0.04 9	3.30 8	0.385	1.57 5	0.17	14.57 3	0.688
H-Glucose	2.21 1	0.27 6	17.70 6	0.444	4.23 4	0.47 2	38.0 07	0.163	0.97 4	0.95 6	0.992	0.643
H-HOMA	0.43 6	0.05 7	3.366	0.414	0.81 7	0.77	0.86 7	0.159	1.71 3	0.19 4	15.15 8	0.626
H-Cholesterol	1.59 1	0.35 3	7.177	0.543	2.66 7	0.52 7	13.4 86	0.22	0.94 1	0.91 4	0.968	0.479
H-Triglycerides	2.19 1	0.79 4	6.048	0.121	2.48 2	0.64 8	9.50 8	0.172	1.77 1	0.34 7	9.036	0.488
L-HDL	1.24 9	0.46 9	3.331	0.656	0.85 3	0.17 3	4.20 3	0.846	1.96 6	0.46 2	8.375	0.354
H-LDL	1.33 7	0.17 1	10.46 8	0.782	2.05 5	0.24 2	17.4 5	0.502	0.96 7	0.94 7	0.987	0.603
rs59634436												
	Total				Men				Women			
Clinical marker	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value			
H-BMI	2.12 9	1.25 6	3.608	0.004	1.62 7	0.76 5	3.46 1	0.204	2.76 1	1.31 4	5.802	0.006
H- Waist	1.68 5	0.99 4	2.856	0.051	1.81 8	0.82 4	4.01	0.135	1.60 4	0.78 2	3.287	0.195
H-WHI	1.27 8	0.76 2	2.143	0.352	1.38 9	0.63 9	3.01 9	0.407	1.25 6	0.58 4	2.703	0.56
H-WHR	1.52 9	0.91 2	2.565	0.106	1.27 9	0.60 6	2.70 1	0.519	1.80 3	0.87 8	3.701	0.105

H-%BF	1.87 9	1.09 1	3.238	0.021	2.33 3	1.02 7	5.29 9	0.039	1.56 9	0.74 9	3.287	0.231
H-Insulin	2.23 7	1.16 8	4.284	0.013	2.87	1.21 2	6.79 7	0.013	1.55 7	0.54	4.489	0.412
H-Glucose	3.59 7	1.22 5	10.56 1	0.013	7.40 7	1.87 6	29.2 51	0.001	1.16	0.13 8	9.726	0.891
H-HOMA	2.02 3	1.05 2	3.888	0.032	3.63 5	1.56 7	8.43 3	0.002	0.82 1	0.23 5	2.867	0.758
H-Cholesterol	1.51 9	0.65	3.553	0.332	1.42 6	0.46	4.41 9	0.538	1.67 7	0.46	6.12	0.43
H-Triglycerides	1.46 8	0.81 1	2.658	0.2	1.27 3	0.55 7	2.91 1	0.567	1.75 6	0.74 4	4.146	0.195
L-HDL	1.21 3	0.71 6	2.055	0.474	1.24 7	0.54 6	2.84 8	0.602	1.2	0.58 8	2.448	0.617
H-LDL	1.51 4	0.50 5	4.54	0.457	1.10 3	0.24	5.07	0.9	2.39 3	0.47 7	12.01 5	0.277
rs78160528												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.00 8	0.37 3	2.728	0.988	1.11 9	0.26 2	4.78 2	0.88	0.93 2	0.23 6	3.684	0.92
H- Waist	1.43 8	0.54 8	3.771	0.459	1.01 4	0.2	5.14 3	0.986	1.75 9	0.49 8	6.214	0.376
H-WHI	1.09 2	0.42 5	2.807	0.856	0.72 2	0.17 7	2.94 7	0.65	1.75 6	0.48 3	6.382	0.388
H-WHR	1.33 9	0.52 4	3.423	0.542	1.33 6	0.32 7	5.45 2	0.687	1.34 1	0.38	4.733	0.648
H-%BF	1.17 5	0.44 7	3.089	0.744	1.22 9	0.27	5.59 5	0.791	1.17 6	0.33 3	4.15	0.802
H-Insulin	1.36 2	0.36 6	5.071	0.645	2.27 3	0.36 8	14.0 34	0.367	0.88 6	0.10 5	7.457	0.912
H-Glucose	0.97 1	0.95 7	0.985	0.462	0.96 8	0.94 7	0.98 9	0.608	0.97 3	0.95 5	0.992	0.603
H-HOMA	0.77	0.17 4	3.419	0.731	0.65 9	0.07 9	5.49 4	0.699	0.93 7	0.11 5	7.655	0.952
H-Cholesterol	1.48 9	0.33 2	6.68	0.602	3.12 3	0.60 1	16.2 44	0.156	0.94	0.91 4	0.967	0.427
H-Triglycerides	1.52 5	0.53 3	4.364	0.429	1.83 5	0.42 7	7.87 6	0.409	1.31 8	0.27 1	6.397	0.732
L-HDL	2.27 5	0.88 4	5.855	0.081	5.29 9	1.23 4	22.7 57	0.013	1.16 5	0.33 1	4.109	0.812
H-LDL	4.64 2	1.25 8	17.12	0.012	5.88 9	1.09 5	31.6 83	0.02	3.60 5	0.41 2	31.56 9	0.218
rs16997129												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.89 4	0.61 6	1.296	0.554	0.88 2	0.52 3	1.48 8	0.639	0.91 3	0.53 7	1.553	0.739
H- Waist	0.90 1	0.61 9	1.311	0.585	1.05 3	0.59	1.87 8	0.863	0.77 2	0.46 6	1.278	0.316
H-WHI	0.89 6	0.63	1.275	0.542	1.25 9	0.76 2	2.07 8	0.37	0.64 6	0.38	1.1	0.107

H-WHR	0.84	0.59	1.195	0.332	0.95 3	0.57 7	1.57 5	0.853	0.74 1	0.45 1	1.218	0.238
H-%BF	1.02 2	0.71 4	1.461	0.907	0.69 1	0.41 3	1.15 5	0.159	1.53 1	0.91 6	2.559	0.104
H-Insulin	1.06 4	0.61 7	1.836	0.824	0.90 2	0.43 9	1.85 3	0.78	1.29 7	0.54 9	3.066	0.555
H-Glucose	1.43 9	0.46 3	4.475	0.528	1.67 6	0.34 1	8.22 8	0.522	1.23 4	0.24 4	6.23	0.8
H-HOMA	0.92 9	0.55 1	1.566	0.781	0.88 3	0.44 5	1.75 3	0.723	1.02 3	0.45 1	2.322	0.957
H-Cholesterol	0.93	0.49 1	1.764	0.825	1.91 7	0.75 2	4.88 2	0.168	0.38 4	0.14 7	1.001	0.044
H-Triglycerides	0.76	0.49 9	1.158	0.201	0.85 1	0.48 4	1.49 7	0.577	0.68 1	0.36	1.289	0.237
L-HDL	1.05 5	0.73 3	1.518	0.775	1.00 7	0.56 8	1.78 4	0.981	1.03 3	0.63 1	1.69	0.897
H-LDL	1.88 7	0.7	5.084	0.203	2.29 5	0.64 3	8.19 1	0.191	1.44 6	0.29 5	7.098	0.649
rs3813827												
	Total				Men			Women				
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	2.66 9	0.97 9	7.277	0.047	2.39 4	0.62 8	9.12 5	0.19	2.98 9	0.65 6	13.62 8	0.14
H- Waist	0.73 9	0.23 5	2.322	0.604	0.37 1	0.04 6	3.02 2	0.337	1.30 2	0.28 6	5.926	0.733
H-WHI	1.37 3	0.50 8	3.709	0.531	0.90 8	0.23 9	3.45 6	0.888	1.97	0.43 2	8.99	0.375
H-WHR	0.79 1	0.28 4	2.206	0.654	0.65 4	0.16	2.66 9	0.553	0.99 6	0.21 9	4.529	0.996
H-%BF	1.57 7	0.55 4	4.491	0.39	1.15 1	0.30 2	4.38 1	0.837	2.37 9	0.42 9	13.19 3	0.309
H-Insulin	0.81 2	0.17 6	3.74	0.79	0.46 3	0.05 6	3.86 8	0.47	1.57 5	0.17	14.57 3	0.688
H-Glucose	0.97 1	0.95 7	0.985	0.489	0.96 8	0.94 7	0.98 9	0.586	0.97 4	0.95 6	0.992	0.665
H-HOMA	0.95 4	0.21 1	4.315	0.952	0.57 4	0.07	4.70 6	0.602	1.71 3	0.19 4	15.15 8	0.626
H-Cholesterol	0.77 8	0.10 1	6.024	0.81	0.89 6	0.86 1	0.93 3	0.309	2.81 4	0.32	24.71 2	0.332
H-Triglycerides	0.9	0.25 2	3.209	0.871	0.85 3	0.17 3	4.20 3	0.846	0.86 7	0.10 2	7.364	0.897
L-HDL	0.80 1	0.27 5	2.338	0.685	1.52 2	0.37 1	6.24 8	0.559	0.45 6	0.08 7	2.389	0.343
H-LDL	1.42 8	0.18 2	11.22 9	0.734	0.93 9	0.91 1	0.96 8	0.447	5.46 3	0.59 4	50.22 2	0.094
rs11737840												
	Total				Men			Women				
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.21 2	0.80 7	1.82	0.354	1.32 4	0.75 9	2.31	0.324	1.07 3	0.58 9	1.956	0.816
H- Waist	1.30 8	0.86 9	1.967	0.198	1.17 5	0.63 7	2.16 7	0.607	1.55	0.88 1	2.728	0.128

H-WHI	1.37 9	0.93 5	2.034	0.105	1.32 9	0.76 3	2.31 3	0.316	1.29 1	0.70 7	2.36	0.406
H-WHR	1.04 4	0.70 6	1.542	0.83	1.06 3	0.61 7	1.83	0.827	1.02 4	0.58 3	1.797	0.935
H-%BF	1.13 9	0.76 9	1.689	0.516	1.00 9	0.58 5	1.74 2	0.973	1.25 9	0.71 1	2.229	0.431
H-Insulin	1.08 5	0.61	1.929	0.781	1.63 1	0.79 2	3.36 1	0.184	0.48 4	0.16 1	1.457	0.19
H-Glucose	1.47 1	0.50 9	4.254	0.474	1.57 5	0.38 3	6.46 8	0.527	1.31 7	0.25 9	6.686	0.74
H-HOMA	0.91 6	0.50 6	1.656	0.771	1.12 7	0.54 2	2.34 3	0.751	0.55 5	0.18 6	1.653	0.286
H-Cholesterol	1.07 2	0.53	2.168	0.847	1.20 4	0.50 8	2.85 4	0.674	0.77 3	0.21 7	2.758	0.692
H-Triglycerides	0.87 6	0.53 7	1.428	0.596	1.04 5	0.56 3	1.93 9	0.89	0.59 3	0.25 3	1.39	0.226
L-HDL	0.91 4	0.61	1.37	0.665	1.15 3	0.62 6	2.12 4	0.65	0.83 3	0.47 7	1.456	0.523
H-LDL	1.49 9	0.64 1	3.505	0.348	2.3	0.84 1	6.29 1	0.097	0.42 7	0.05 3	3.431	0.41
rs10033691												
	Total				Men			Women				
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.84 4	1.14	2.983	0.012	1.60 9	0.80 5	3.21 6	0.177	2.10 2	1.07 6	4.106	0.027
H- Waist	1.46 3	0.9	2.379	0.124	1.96 5	0.95 4	4.04 6	0.064	1.15 1	0.59 5	2.228	0.677
H-WHI	1.31 2	0.82	2.099	0.257	1.47 3	0.72	3.01 3	0.288	1.29 4	0.64 7	2.587	0.467
H-WHR	1.34 9	0.84 4	2.159	0.211	1.38 5	0.69 9	2.74 4	0.352	1.31 9	0.69 1	2.517	0.402
H-%BF	2.27	1.37 1	3.759	0.001	3.29 9	1.49 3	7.28 8	0.002	1.7	0.86 7	3.335	0.121
H-Insulin	2.09 4	1.13 2	3.874	0.017	2.82 4	1.23 2	6.46 9	0.011	1.47 6	0.55 4	3.929	0.436
H-Glucose	3.68 7	1.32 5	10.26 5	0.008	5.76 5	1.47 5	22.5 24	0.005	2.13	0.41 6	10.91 3	0.355
H-HOMA	1.83 1	0.99 1	3.385	0.051	2.95 7	1.34 2	6.51 4	0.005	0.90 1	0.29 8	2.723	0.854
H-Cholesterol	1.13	0.48 8	2.617	0.775	0.73 8	0.21 2	2.57	0.634	1.86 1	0.58 3	5.943	0.289
H-Triglycerides	1.33 7	0.77 2	2.317	0.3	1.08 3	0.49 8	2.35 5	0.841	1.72 7	0.78 9	3.78	0.168
L-HDL	1.11 6	0.68 9	1.809	0.656	0.92 1	0.41 4	2.05 1	0.841	1.25 4	0.65 8	2.388	0.493
H-LDL	1.48 3	0.54 5	4.034	0.438	0.39 5	0.05 1	3.07	0.36	4.47 9	1.21	16.58 4	0.015
rs2005701												
	Total				Men			Women				
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.28 5	0.88 6	1.863	0.186	0.95 9	0.57	1.61 5	0.876	1.71 7	1.00 4	2.937	0.047

H- Waist	1.39 6	0.95 7	2.037	0.083	0.82 4	0.47	1.44 4	0.5	2.16 3	1.28 7	3.634	0.003
H-WHI	1.33 9	0.94 5	1.896	0.1	1.13 8	0.69 2	1.87 1	0.612	1.65 9	0.95 8	2.876	0.07
H-WHR	1.21 9	0.86 1	1.726	0.265	0.92	0.55 9	1.51 4	0.744	1.58 9	0.97 5	2.59	0.063
H-%BF	1.15 2	0.81 3	1.631	0.428	1.20 2	0.72 2	2	0.481	1.08 6	0.67 2	1.754	0.737
H-Insulin	1.13 3	0.66 2	1.94	0.649	1.60 7	0.76 9	3.35 6	0.207	0.76 8	0.34 6	1.705	0.518
H-Glucose	1.58 3	0.50 4	4.972	0.428	1.01 1	0.24 7	4.13 3	0.988	3.29 2	0.39 1	27.70 7	0.247
H-HOMA	1.07	0.63 9	1.791	0.798	1.45 6	0.70 9	2.99	0.306	0.72 1	0.33 8	1.538	0.397
H-Cholesterol	0.50 2	0.23 1	1.089	0.214	0.68 2	0.37 3	1.24 9	0.077	1.07 9	0.39 3	2.961	0.883
H-Triglycerides	1.08 8	0.71 3	1.661	0.696	1.01 4	0.57 6	1.78 6	0.962	1.17 1	0.61 3	2.234	0.634
L-HDL	0.92 9	0.65 4	1.32	0.682	0.67 6	0.38 9	1.17 4	0.164	1.18 7	0.74 1	1.899	0.477
H-LDL	0.82 8	0.36 9	1.859	0.647	0.70 6	0.26	1.91 8	0.495	1.07 7	0.26 4	4.394	0.918
rs76145164												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.52 8	0.63 3	3.692	0.343	0.68 4	0.17 7	2.63 7	0.58	3.40 4	0.93 8	12.36 2	0.049
H- Waist	0.88 5	0.33 8	2.32	0.805	0.66 3	0.14	3.14 5	0.604	1.15	0.31 7	4.164	0.832
H-WHI	1.51 1	0.63 1	3.614	0.352	1.27 7	0.36 5	4.46 3	0.703	1.74 8	0.48 1	6.353	0.392
H-WHR	0.65	0.25 8	1.634	0.357	0.48 1	0.12 5	1.85 3	0.28	0.87 7	0.24 2	3.172	0.842
H-%BF	0.77 2	0.32	1.862	0.565	0.51 4	0.14 7	1.79 7	0.291	1.16 8	0.33 1	4.123	0.81
H-Insulin	1.39 9	0.44 4	4.415	0.566	1.69 8	0.40 7	7.07 3	0.465	0.88 6	0.10 5	7.457	0.912
H-Glucose	0.97	0.95 7	0.984	0.425	0.96 7	0.94 7	0.98 9	0.544	0.97 3	0.95 5	0.992	0.602
H-HOMA	1.48	0.48 4	4.525	0.49	1.79 5	0.45 7	7.04 8	0.398	0.93 3	0.11 4	7.625	0.949
H-Cholesterol	0.57 6	0.07 6	4.39	0.591	0.89 5	0.85 9	0.93 2	0.258	1.85	0.22 1	15.45 9	0.566
H-Triglycerides	3.07 3	1.26 4	7.471	0.009	1.74 8	0.49 6	6.15 4	0.381	5.66 7	1.57 6	20.37	0.003
L-HDL	1.34 7	0.55 8	3.251	0.507	0.65 4	0.13 8	3.1	0.592	2.81 4	0.71 4	11.08 9	0.125
H-LDL	0.95 3	0.93 6	0.971	0.311	0.93 8	0.91	0.96 7	0.398	0.96 7	0.94 7	0.987	0.559
rs76338299												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value

H-BMI	0.91 6	0.50 2	1.673	0.776	1.09 7	0.48 2	2.49 7	0.826	0.74 4	0.30 3	1.824	0.518
H- Waist	1.23 4	0.68 5	2.221	0.484	0.85 3	0.33	2.20 4	0.743	1.68 1	0.76	3.716	0.197
H-WHI	1.09 5	0.62 3	1.923	0.753	0.75 8	0.34 3	1.67 8	0.495	1.58 7	0.69 6	3.618	0.271
H-WHR	1.06 4	0.60 6	1.87	0.829	0.75 5	0.33 3	1.71 2	0.501	1.48 2	0.67 2	3.27	0.329
H-%BF	1.18 7	0.67 4	2.091	0.553	1.17 2	0.52 7	2.60 5	0.698	1.18 7	0.53 1	2.656	0.677
H-Insulin	0.80 2	0.32 4	1.986	0.633	0.76 2	0.24 3	2.38 9	0.642	0.76 3	0.16 7	3.494	0.728
H-Glucose	0.96 9	0.95 4	0.983	0.184	0.96 5	0.94 3	0.98 8	0.328	0.97 2	0.95 3	0.991	0.369
H-HOMA	0.75 7	0.31 2	1.836	0.538	0.79 3	0.26	2.41 7	0.685	0.65 4	0.14 7	2.904	0.575
H-Cholesterol	0.65 4	0.19 6	2.181	0.488	0.31 9	0.04 2	2.44	0.248	1.28 4	0.28	5.893	0.748
H-Triglycerides	0.54 3	0.23 9	1.231	0.139	0.65 5	0.23 8	1.79 8	0.41	0.37 7	0.08 6	1.64	0.178
L-HDL	0.84 8	0.47	1.529	0.583	1.56 3	0.66 9	3.65 4	0.301	0.51 9	0.22 7	1.187	0.116
H-LDL	1.77 3	0.59	5.327	0.302	1.30 7	0.28 2	6.04 5	0.733	2.64 4	0.53 3	13.10 8	0.218
rs6533491												
	Total				Men				Women			
Clinical marker	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
H-BMI	0.89 3	0.63 3	1.261	0.521	0.79 6	0.48 8	1.29 8	0.361	1.01 2	0.62 1	1.647	0.963
H- Waist	0.67 6	0.47 6	0.958	0.028	0.88 6	0.51 8	1.51 4	0.658	0.52 6	0.32 9	0.841	0.007
H-WHI	0.70 4	0.50 8	0.977	0.035	0.87 7	0.54 9	1.40 2	0.586	0.55 9	0.33 8	0.925	0.023
H-WHR	0.81 7	0.58 9	1.132	0.225	0.91 8	0.57 5	1.46 6	0.721	0.73 1	0.46 3	1.153	0.179
H-%BF	0.94 8	0.68 2	1.317	0.751	0.66 3	0.41 2	1.06 6	0.09	1.34 5	0.84 8	2.133	0.209
H-Insulin	1.32 5	0.80 6	2.177	0.268	1.08 6	0.56 1	2.10 4	0.807	1.61 8	0.75 1	3.486	0.218
H-Glucose	1.04 7	0.39 8	2.75	0.927	0.79 4	0.20 9	3.02	0.736	1.46	0.34 3	6.217	0.608
H-HOMA	0.89 8	0.55 3	1.458	0.663	0.77	0.40 3	1.47 1	0.43	1.13 3	0.53 6	2.394	0.744
H-Cholesterol	1.06 1	0.58 4	1.926	0.847	1.26	0.58 2	2.72 4	0.559	0.86	0.33 2	2.228	0.757
H-Triglycerides	0.99	0.66 5	1.474	0.961	1	0.58 7	1.70 5	1	1.02 2	0.55 7	1.875	0.944
L-HDL	1.28 3	0.91 7	1.795	0.145	1.34 6	0.78 8	2.30 1	0.278	1.19 6	0.76 4	1.873	0.435
H-LDL	1.28	0.57 8	2.836	0.542	1.90 2	0.68 4	5.29	0.213	0.68 6	0.18 1	2.606	0.58
rs11937052												
	Total				Men				Women			

Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.79 7	1.11 3	2.901	0.015	1.60 9	0.80 5	3.21 6	0.177	2	1.03	3.884	0.038
H- Waist	1.77 6	1.10 4	2.858	0.017	2.44 1	1.20 6	4.94	0.011	1.37 4	0.71 9	2.626	0.336
H-WHI	1.05	0.65 7	1.676	0.84	1.54 3	0.75 7	3.14 3	0.231	0.72 8	0.34 2	1.546	0.408
H-WHR	1.20 8	0.75 8	1.924	0.427	1.65 8	0.84 1	3.26 9	0.142	0.90 7	0.47 4	1.735	0.768
H-%BF	1.49 7	0.92 4	2.426	0.1	2.10 1	1.00 9	4.37 5	0.044	1.13 3	0.58 5	2.193	0.712
H-Insulin	1.35 9	0.69 3	2.665	0.372	1.52 9	0.64 6	3.62	0.334	1.04 3	0.33 6	3.242	0.942
H-Glucose	1.95 9	0.62 3	6.159	0.242	5.57 7	1.42 9	21.7 66	0.006	0.97	0.95	0.991	0.246
H-HOMA	1.34	0.69 7	2.575	0.38	1.76 9	0.76 5	4.09	0.179	0.90 1	0.29 8	2.723	0.854
H-Cholesterol	1.53	0.71 1	3.293	0.275	1.37 9	0.49 3	3.85 7	0.541	1.80 7	0.56 6	5.766	0.313
H-Triglycerides	1.19	0.68 3	2.075	0.539	1.4	0.66 8	2.93 3	0.373	0.98 6	0.41 2	2.355	0.974
L-HDL	1.35	0.84 2	2.163	0.212	2.10 5	1.03 5	4.28	0.037	0.96 1	0.50 7	1.823	0.904
H-LDL	0.76 9	0.22 6	2.612	0.673	0.84 3	0.18 5	3.83 9	0.826	0.66 7	0.08 2	5.396	0.703
rs11098070												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.20 9	0.81 1	1.803	0.351	1.15 1	0.65 5	2.02 4	0.626	1.26 9	0.72 1	2.236	0.41
H- Waist	1.12 6	0.75 4	1.682	0.563	1.27 8	0.67 9	2.40 7	0.449	1.03 3	0.60 8	1.754	0.905
H-WHI	0.96 6	0.66 6	1.4	0.855	1.21 1	0.71 1	2.06 5	0.482	0.74 6	0.42 9	1.297	0.3
H-WHR	1.12 5	0.77 3	1.637	0.539	1.21 9	0.70 9	2.09 5	0.475	1.04 4	0.62	1.757	0.872
H-%BF	1.10 4	0.75 8	1.606	0.607	1.41 3	0.82 3	2.42 5	0.21	0.87 7	0.52	1.479	0.624
H-Insulin	1.09 4	0.61 8	1.935	0.759	1.75 5	0.75 6	4.07 4	0.189	0.63 6	0.28 5	1.419	0.268
H-Glucose	1.66 1	0.47 1	5.86	0.426	1.04 4	1.01 5	1.07 4	0.072	0.58	0.13 6	2.485	0.46
H-HOMA	1.23 4	0.69 3	2.198	0.476	2.09 9	0.88 7	4.96 6	0.087	0.69 6	0.31 2	1.556	0.377
H-Cholesterol	2.05 1	0.89 8	4.687	0.083	1.76 2	0.64 7	4.79 9	0.264	2.76 9	0.61 9	12.38 1	0.167
H-Triglycerides	0.98 6	0.62 7	1.55	0.95	0.96 5	0.52 6	1.77 1	0.909	1.00 8	0.50 6	2.009	0.982
L-HDL	0.74 8	0.51 4	1.088	0.129	0.96 5	0.52 6	1.77 1	0.909	0.60 9	0.36 6	1.015	0.056
H-LDL	1.57 5	0.58 6	4.234	0.365	1.14 3	0.36 1	3.62 2	0.821	3.27 3	0.40 8	26.24 3	0.239
rs80343897												

Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.88 6	0.62 3	1.262	0.505	0.88 5	0.53 7	1.46	0.634	0.88 9	0.53 9	1.466	0.645
H- Waist	0.91 6	0.64 1	1.309	0.63	0.74 7	0.42 8	1.30 3	0.304	1.06 2	0.66 1	1.705	0.806
H-WHI	1.18 8	0.85 3	1.654	0.31	1.12 4	0.69 7	1.80	0.644	1.31 8	0.79 6	2.181	0.284
H-WHR	1.08 2	0.77 6	1.508	0.642	1.00 7	0.62 5	1.62 1	0.978	1.15 9	0.72 9	1.841	0.535
H-%BF	1.02 2	0.73 1	1.428	0.901	1.17 1	0.72 3	1.89 9	0.523	0.90 5	0.56 8	1.444	0.678
H-Insulin	0.70 8	0.42 2	1.189	0.192	0.56 2	0.27 8	1.13 6	0.107	0.93 5	0.42 9	2.037	0.866
H-Glucose	0.20 2	0.04 5	0.895	0.02	0.40 7	0.08 3	1.99 7	0.255	0.96 2	0.93 4	0.99	0.026
H-HOMA	0.80 1	0.48 6	1.322	0.386	0.66 7	0.33 9	1.31 2	0.24	1.01 6	0.47 8	2.162	0.966
H-Cholesterol	1.57 7	0.86 8	2.865	0.132	1.64 9	0.76 4	3.56 1	0.201	1.48 7	0.57 3	3.858	0.414
H-Triglycerides	0.93 1	0.62	1.399	0.732	0.98 1	0.57	1.68 9	0.945	0.87 1	0.46 7	1.622	0.664
L-HDL	0.65 4	0.46 2	0.924	0.016	0.60 9	0.34 7	1.07	0.084	0.65 8	0.41 6	1.041	0.074
H-LDL	1.37 3	0.63 4	2.974	0.421	1.32 1	0.49 4	3.53	0.579	1.47 1	0.41 7	5.191	0.548
rs114422025												
Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	1.26 7	0.40 9	3.924	0.682	0.92 8	0.16 7	5.15 7	0.932	1.65 5	0.36 3	7.544	0.513
H- Waist	1.40 7	0.45 4	4.361	0.553	1.53 6	0.27 5	8.57	0.623	1.30 2	0.28 6	5.926	0.733
H-WHI	0.84 8	0.27 4	2.622	0.774	1.46 9	0.26 5	8.15 4	0.659	0.42 4	0.05	3.57	0.418
H-WHR	0.82 6	0.26 7	2.555	0.74	1.33 3	0.26 4	6.72 2	0.728	0.52 4	0.1	2.744	0.439
H-%BF	1.04	0.33 1	3.264	0.946	1.38 3	0.22 7	8.40 8	0.725	0.87 4	0.19 2	3.976	0.862
H-Insulin	3.10 5	0.85 5	11.28 2	0.071	1.69 3	0.3	9.55 4	0.549	6.58 6	0.89 3	48.59 3	0.035
H-Glucose	0.97 1	0.95 7	0.985	0.534	0.96 8	0.94 8	0.98 9	0.658	0.97 4	0.95 6	0.992	0.665
H-HOMA	4.67 8	1.44 5	15.14 1	0.005	4.92 9	0.96 1	25.2 64	0.036	4.44 8	0.78 1	25.35	0.068
H-Cholesterol	0.97 8	0.12 4	7.691	0.983	1.81 4	0.20 5	16.0 85	0.589	0.94 1	0.91 5	0.968	0.509
H-Triglycerides	2.50 5	0.80 5	7.799	0.102	3.08 7	0.60 9	15.6 48	0.154	2.13 3	0.40 2	11.31 6	0.364
L-HDL	2.10 4	0.69 8	6.344	0.178	1.51 4	0.27 1	8.44 6	0.635	2.96 8	0.56 7	15.53 4	0.179
H-LDL	1.79 5	0.22 5	14.33 2	0.577	3.32 5	0.36 6	30.1 74	0.26	0.96 7	0.94 7	0.987	0.627

rs6533495												
Clinical marker	Total				Men			Women				
	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value
H-BMI	0.92 6	0.63 7	1.347	0.687	0.88 7	0.52 2	1.51	0.661	0.96 4	0.56 8	1.637	0.893
H- Waist	0.88 1	0.60 4	1.285	0.512	0.77 1	0.43 4	1.36 8	0.375	0.97 8	0.58 9	1.624	0.933
H-WHI	0.76 7	0.53 8	1.093	0.143	0.71 4	0.42 4	1.20 4	0.207	0.77	0.45 1	1.315	0.339
H-WHR	0.85 2	0.59 7	1.217	0.38	0.71 7	0.43	1.19 6	0.203	1.00 3	0.61	1.647	0.991
H-%BF	1.03	0.71 9	1.475	0.874	0.91 9	0.54 8	1.54 1	0.749	1.14 8	0.69 3	1.9	0.594
H-Insulin	0.81	0.47 6	1.379	0.439	0.89 4	0.43 5	1.83 6	0.761	0.70 6	0.31 7	1.572	0.395
H-Glucose	0.77 3	0.28 1	2.123	0.617	0.51 1	0.13 4	1.95 3	0.32	1.3	0.25 8	6.563	0.751
H-HOMA	0.98 9	0.58	1.688	0.968	1.17 9	0.57 2	2.43	0.658	0.80 4	0.36 1	1.791	0.595
H-Cholesterol	1.81 9	0.85 9	3.853	0.114	1.35 4	0.55 6	3.30 1	0.505	3.39 6	0.76 1	15.15 8	0.091
H-Triglycerides	1.01 9	0.65 9	1.575	0.934	0.78 7	0.44 4	1.39 5	0.414	1.44 1	0.71 5	2.902	0.306
L-HDL	0.79 8	0.55 6	1.145	0.22	0.66 5	0.37 7	1.17 1	0.158	0.90 3	0.55 5	1.469	0.681
H-LDL	1.91 7	0.71 4	5.146	0.19	2.02 5	0.56 7	7.23 6	0.27	1.75	0.36 4	8.403	0.481

rs28722886												
Clinical marker	Total				Men			Women				
	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value
H-BMI	0.84 5	0.59 4	1.201	0.347	1.04 1	0.63 3	1.71 3	0.874	0.69	0.41 9	1.138	0.146
H- Waist	0.85 6	0.60 1	1.22	0.392	0.86 6	0.5 8	1.49 8	0.608	0.82 1	0.51 2	1.314	0.412
H-WHI	1.30 4	0.93 7	1.816	0.116	1.42	0.87 8	2.29 8	0.153	1.36 5	0.82 5	2.258	0.226
H-WHR	1.14 4	0.82 1	1.592	0.428	1.37 5	0.85 3	2.21 7	0.192	0.96 2	0.60 8	1.524	0.871
H-%BF	0.92 8	0.66 5	1.295	0.66	1.05 4	0.65 1	1.70 4	0.832	0.83 2	0.52 2	1.325	0.439
H-Insulin	1.1	0.66 6	1.818	0.711	0.89 6	0.45 2	1.77 7	0.754	1.59 7	0.73 5	3.47	0.237
H-Glucose	0.70 3	0.25 6	1.926	0.491	0.38 6	0.07 9	1.89 1	0.225	1.23 3	0.30 3	5.024	0.771
H-HOMA	1.03 3	0.62 9	1.695	0.899	0.78 8	0.40 2	1.54 6	0.49	1.52 7	0.71 5	3.261	0.273
H-Cholesterol	1.15 8	0.63 7	2.106	0.63	1.55 6	0.72	3.36	0.259	0.76 9	0.29	2.039	0.597
H-Triglycerides	1.17 7	0.78 7	1.76	0.428	1.10 1	0.64	1.89 4	0.73	1.33 9	0.72 6	2.47	0.35
L-HDL	1.30 3	0.92 9	1.829	0.125	1.01 9	0.59 2	1.75 6	0.945	1.50 6	0.95 6	2.372	0.077

H-LDL	0.67 7	0.29 7	1.545	0.353	0.74 3	0.26 7	2.07	0.571	0.60 4	0.14 8	2.463	0.48
rs6533497												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.08 6	0.69 5	1.697	0.719	0.84 7	0.44 8	1.60 1	0.609	0.84 7	0.44 8	1.601	0.31
H- Waist	0.64 7	0.39 7	1.053	0.078	0.65 6	0.31 1	1.38 5	0.268	0.64 9	0.33 9	1.245	0.193
H-WHI	0.84 1	0.54 7	1.294	0.432	1.02 3	0.55 9	1.87 3	0.942	0.56 1	0.26 8	1.175	0.123
H-WHR	0.85 5	0.55 7	1.315	0.477	0.75 9	0.41 1	1.40 1	0.379	0.96 2	0.52 6	1.76	0.901
H-%BF	0.87	0.56 4	1.342	0.53	0.68 1	0.37 1	1.24 9	0.214	1.10 1	0.59 2	2.045	0.762
H-Insulin	1.13	0.61 2	2.086	0.697	1.49 7	0.69 1	3.24 1	0.306	0.64 6	0.21 3	1.962	0.44
H-Glucose	1.97 6	0.68 1	5.733	0.203	1.27 2	0.25 7	6.30 2	0.769	3.02 4	0.7	13.06 2	0.121
H-HOMA	1.16 4	0.63	2.148	0.629	1.24 5	0.56 9	2.72 8	0.585	0.97 5	0.35 5	2.681	0.961
H-Cholesterol	0.79 7	0.34 7	1.832	0.593	0.91 1	0.33 1	2.51 1	0.858	0.59 1	0.13 2	2.649	0.489
H-Triglycerides	1.11 1	0.66 6	1.855	0.687	1.22 6	0.62 8	2.39 1	0.552	0.93 7	0.41 1	2.133	0.876
L-HDL	1.14 9	0.74 6	1.771	0.529	1.71 4	0.9	3.26 6	0.099	0.87 5	0.48 2	1.588	0.662
H-LDL	0.79 8	0.27	2.357	0.683	0.26 2	0.03 4	2.02 1	0.169	2.14 3	0.53 6	8.57	0.272
rs77504516												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.29 7	0.64 9	2.596	0.461	1.24	0.42 8	3.59 1	0.692	1.37 2	0.54 9	3.431	0.499
H- Waist	1.11 9	0.54 7	2.29	0.758	2.10 3	0.72 1	6.13	0.166	0.67 3	0.25 3	1.787	0.426
H-WHI	0.67	0.32 8	1.367	0.269	0.83 5	0.29 4	2.36 9	0.736	0.58 8	0.19 2	1.801	0.349
H-WHR	0.83 6	0.41 9	1.668	0.612	1.17 2	0.41 3	3.32 4	0.767	0.64 5	0.25 3	1.647	0.358
H-%BF	0.82 1	0.41 7	1.619	0.57	1.05	0.37	2.98	0.928	0.70 2	0.28 2	1.748	0.447
H-Insulin	0.68 2	0.23 1	2.014	0.487	1.01 4	0.26 7	3.85 6	0.983	0.36 9	0.04 7	2.885	0.325
H-Glucose	0.97 3	0.12 5	7.552	0.979	2.34 8	0.27 4	20.1 04	0.424	0.97 2	0.95 4	0.991	0.442
H-HOMA	0.81 5	0.27 9	2.382	0.708	1.27 9	0.34 2	4.78 6	0.715	0.42 6	0.05 5	3.299	0.402
H-Cholesterol	0.67 5	0.15 7	2.899	0.595	0.62	0.07 9	4.89 4	0.648	0.80 3	0.10 2	6.346	0.835
H-Triglycerides	1.55 9	0.73	3.328	0.248	1.55 3	0.51 2	4.70 7	0.435	1.70 1	0.59 3	4.878	0.319

L-HDL	1.14	0.57 1	2.277	0.711	1.55 3	0.51 2	4.70 7	0.435	0.86 1	0.35 2	2.106	0.744
H-LDL	0.58 8	0.07 7	4.46	0.604	1.13 8	0.14 1	9.21	0.904	0.96 6	0.94 5	0.987	0.389
rs6815102												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.09 5	0.77 1	1.555	0.615	0.91 8	0.55 8	1.51	0.736	1.28 4	0.78 1	2.111	0.326
H- Waist	0.79 7	0.56 1	1.133	0.206	0.71	0.41 3	1.22	0.215	0.89 4	0.56	1.428	0.641
H-WHI	1.04 6	0.75 1	1.455	0.791	1.08 3	0.67 2	1.74 7	0.744	0.91 6	0.55 5	1.512	0.732
H-WHR	1.08 5	0.77 9	1.511	0.63	1.11 4	0.68 9	1.8	0.661	1.06	0.67	1.677	0.804
H-%BF	1.14 1	0.81 7	1.593	0.44	1.07 6	0.66 4	1.74 3	0.769	1.18 2	0.74 4	1.88	0.481
H-Insulin	0.57 5	0.34 9	0.949	0.029	0.47 8	0.24 4	0.93 9	0.03	0.68 4	0.31 9	1.465	0.328
H-Glucose	0.71 6	0.26 5	1.934	0.509	0.52 4	0.13 8	1.99 4	0.337	1.03 5	0.22 8	4.706	0.964
H-HOMA	0.83 4	0.51 2	1.359	0.466	0.65 3	0.34 1	1.25 1	0.198	1.06 4	0.50 1	2.263	0.872
H- Cholesterol	1.17 9	0.63 9	2.174	0.598	1.10 5	0.50 1	2.43 6	0.805	1.23 4	0.46 5	3.273	0.673
H- Triglyceride s	0.93 1	0.62 2	1.396	0.731	0.88 7	0.51 5	1.52 8	0.666	0.94 3	0.51 1	1.743	0.853
L-HDL	0.85 5	0.61	1.2	0.366	0.95 8	0.55 5	1.65 4	0.878	0.83	0.52 9	1.303	0.419
H-LDL	1.47	0.64 9	3.327	0.354	0.95 2	0.35 2	2.57 9	0.924	3.20 5	0.66 9	15.34 6	0.126
rs4326075												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.96 2	0.67 6	1.368	0.83	0.86 7	0.52 6	1.42 7	0.575	1.05 5	0.64 1	1.738	0.834
H- Waist	0.92	0.64 4	1.314	0.646	0.64	0.36 5	1.12 1	0.118	1.24 4	0.77 4	1.999	0.369
H-WHI	1.28 3	0.92 1	1.789	0.141	1.13 3	0.70 3	1.82 7	0.61	1.40 5	0.84 7	2.331	0.188
H-WHR	1.15 7	0.83	1.614	0.391	1.11 7	0.69 4	1.79 8	0.649	1.19 7	0.75 1	1.908	0.451
H-%BF	1.19 9	0.85 7	1.678	0.289	1.23 5	0.76 3	2	0.392	1.15 1	0.71 9	1.841	0.559
H-Insulin	0.72 6	0.43 2	1.221	0.227	0.50 2	0.24 4	1.03 1	0.058	1.11 2	0.51 5	2.4	0.788
H-Glucose	0.31 2	0.08 9	1.099	0.056	0.38 5	0.07 9	1.88 7	0.224	0.22 4	0.02 7	1.844	0.13
H-HOMA	0.92 8	0.56 5	1.523	0.767	0.66 9	0.34 3	1.30 6	0.239	1.33 4	0.63	2.824	0.452
H- Cholesterol	1.35	0.74 3	2.456	0.324	1.13 9	0.52 6	2.46 7	0.742	1.66 4	0.64 1	4.318	0.293

H-Triglycerides	0.68 7	0.45 2	1.046	0.08	0.63 3	0.36 1	1.10 9	0.109	0.72 2	0.37 9	1.374	0.321
L-HDL	0.55 2	0.31 2	0.977	0.042	0.55 2	0.31 2	0.97 7	0.04	0.84 4	0.53 3	1.336	0.47
H-LDL	1.65 1	0.76 2	3.578	0.2	1.60 1	0.59 9	4.27 9	0.346	1.64	0.46 5	5.79	0.439
rs116418972												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.15 5	0.33 4	3.994	0.82	1.86 7	0.11 6	30.1 79	0.656	1.09 2	0.26 7	4.464	0.902
H- Waist	1.28 3	0.37 1	4.436	0.694	3.07 1	0.19 1	49.7 52	0.408	0.85 9	0.21 1	3.504	0.833
H-WHI	0.77 4	0.22 4	2.674	0.686	0.57 5	0.52 1	0.63 6	0.227	0.73 1	0.14 9	3.592	0.7
H-WHR	0.75 4	0.21 8	2.605	0.655	1.32 8	0.08 2	21.4 41	0.842	0.65 6	0.16 1	2.674	0.556
H-%BF	0.86 4	0.26 1	2.863	0.811	0.51 8	0.46 2	0.58 1	0.175	0.57 5	0.14 1	2.345	0.437
H-Insulin	0.81 5	0.77 9	0.853	0.246					0.85 8	0.81 3	0.905	0.322
H-Glucose	0.97 1	0.95 8	0.985	0.568	0.96 9	0.94 9	0.98 9	0.8	0.97 4	0.95 6	0.992	0.622
H-HOMA	0.85 9	0.83	0.889	0.201	0.82 2	0.77 6	0.87 1	0.513	0.89 1	0.85 6	0.928	0.326
H-Cholesterol	0.92	0.89 8	0.942	0.329	0.89 9	0.86 4	0.93 4	0.636	0.94	0.91 4	0.967	0.452
H-Triglycerides	0.79 3	0.76	0.826	0.091	0.74 8	0.7	0.8	0.414	0.83 4	0.79 4	0.877	0.184
L-HDL	2.16	0.65 1	7.162	0.198	3.02 8	0.18 7	49.0 44	0.414	1.46 6	0.38 6	5.565	0.574
H-LDL	0.95 4	0.93 7	0.971	0.468	0.94 1	0.91 4	0.96 8	0.723	0.96 7	0.94 7	0.987	0.58
rs11729740												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.14 3	0.67 1	1.945	0.624	1.61 8	0.76 1	3.43 9	0.209	0.81 9	0.37 8	1.775	0.614
H- Waist	1.02 2	0.59 1	1.769	0.937	1.28	0.56	2.92 6	0.559	0.84 7	0.40 6	1.766	0.658
H-WHI	1.19 6	0.71 8	1.993	0.492	1.17 4	0.54 7	2.52	0.682	1.33 8	0.63 7	2.811	0.443
H-WHR	0.82 3	0.48 9	1.386	0.465	0.95 2	0.44 7	2.02 6	0.899	0.72 3	0.35 2	1.488	0.379
H-%BF	0.76 3	0.45 3	1.284	0.308	0.78 1	0.36 5	1.66 9	0.524	0.75 4	0.36 8	1.547	0.442
H-Insulin	1.17 5	0.55 9	2.471	0.671	1.78 2	0.67 3	4.72 1	0.242	0.72	0.20 4	2.545	0.611
H-Glucose	1.06 1	0.23 7	4.742	0.939	1.03 8	0.12 5	8.58 4	0.973	1.09 4	0.13 1	9.156	0.934
H-HOMA	0.97 1	0.44 2	2.136	0.942	1.25 7	0.44 3	3.56 4	0.669	0.77	0.22 1	2.679	0.682

H-Cholesterol	0.72 2	0.25 1	2.079	0.545	0.95 2	0.27 1	3.34 9	0.939	0.43 4	0.05 6	3.36	0.412
H-Triglycerides	1.14 6	0.62 1	2.114	0.664	1.26	0.55 2	2.87 7	0.585	1.05	0.41 3	2.672	0.919
L-HDL	1.06 3	0.62 8	1.798	0.821	1.04 9	0.44 7	2.46 1	0.913	1.04 3	0.52	2.091	0.907
H-LDL	0.62 4	0.14 4	2.696	0.525	1.11 3	0.24 2	5.11 2	0.891	0.96 4	0.94 2	0.986	0.246
rs2035415												
	Total			Men			Women					
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value
H-BMI	1.03 2	0.70 1	1.522	0.872	0.93	0.52 8	1.63 8	0.803	1.11	0.65	1.895	0.705
H- Waist	0.79 7	0.54 3	1.17	0.247	0.86 8	0.47 1	1.59 9	0.65	0.79 2	0.47 9	1.31	0.365
H-WHI	0.92 4	0.64 2	1.331	0.672	0.93 1	0.54	1.60 4	0.797	0.76 6	0.44 9	1.308	0.331
H-WHR	1.06 8	0.74	1.542	0.725	1.17 8	0.68	2.03 8	0.56	0.98 6	0.6	1.621	0.956
H-%BF	0.97	0.67 1	1.403	0.872	1.07 8	0.62 2	1.87	0.789	0.86 1	0.52 2	1.42	0.56
H-Insulin	0.75 3	0.43 6	1.3	0.308	0.67 8	0.32 6	1.41 1	0.299	0.83 2	0.35 9	1.928	0.669
H-Glucose	1.21 4	0.39	3.779	0.738	2.67 9	0.32 9	21.8 02	0.34	0.68 5	0.16	2.93	0.61
H-HOMA	0.94 6	0.55	1.628	0.842	0.67 4	0.33 2	1.36 7	0.274	1.40 8	0.58 2	3.407	0.447
H-Cholesterol	1.57 6	0.74 3	3.344	0.233	1.03 2	0.42 1	2.52 7	0.946	3.27 2	0.73 3	14.61	0.102
H-Triglycerides	1.00 3	0.64 1	1.569	0.991	0.80 4	0.43 9	1.47	0.479	1.22	0.61 5	2.421	0.571
L-HDL	1.01 9	0.7	1.484	0.922	1.19 6	0.63 4	2.25 5	0.582	1.01 7	0.62 3	1.661	0.946
H-LDL	1.31 6	0.52 1	3.32	0.561	0.77 3	0.26 3	2.27 4	0.64	3.85 7	0.48 2	30.89 6	0.173
rs17041402												
	Total			Men			Women					
Clinical marker	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value	OR	95% CI	<i>p</i>-value
H-BMI	1.42 6	0.53 4	3.806	0.477	0.61 6	0.06 3	5.99 8	0.675	1.92 6	0.62 9	5.895	0.245
H- Waist	1.22 6	0.44 6	3.366	0.693	1.01 4	0.10 4	9.90 9	0.99	1.08 2	0.34 5	3.391	0.893
H-WHI	0.55 8	0.19 4	1.606	0.274	0.72 6	0.10 1	5.22 5	0.75	0.76 6	0.20 6	2.854	0.692
H-WHR	0.92 7	0.34 8	2.469	0.879	0.43 7	0.04 5	4.25 4	0.466	1.14 5	0.37 6	3.491	0.812
H-%BF	0.92 2	0.35	2.423	0.869	0.91 5	0.12 7	6.59 3	0.93	1.00 2	0.32 9	3.057	0.997
H-Insulin	0.81 4	0.77 7	0.852	0.132	0.76 6	0.71	0.82 8	0.438	0.85 6	0.81 1	0.905	0.25
H-Glucose	0.97 1	0.95 7	0.985	0.476	0.96 8	0.94 8	0.98 9	0.719	0.97 3	0.95 5	0.992	0.551

H-HOMA	0.85 7	0.82 8	0.887	0.104	0.82 1	0.77 5	0.87	0.353	0.89	0.85 4	0.927	0.225
H-Cholesterol	0.91 9	0.89 7	0.942	0.223	0.89 8	0.86 3	0.93 4	0.502	0.94	0.91 3	0.967	0.363
H-Triglycerides	0.79	0.75 8	0.824	0.034	0.74 6	0.69 8	0.79 9	0.246	0.83 2	0.79 1	0.876	0.108
L-HDL	2.60 7	0.97 8	6.952	0.047	9.34 8	0.95 7	91.3 32	0.02	1.37 1	0.45	4.177	0.579
H-LDL	0.95 4	0.93 7	0.971	0.364	0.94	0.91 3	0.96 8	0.615	0.96 6	0.94 6	0.987	0.504
rs59111930												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.75 3	0.53 3	1.064	0.108	0.71 8	0.43 9	1.17 4	0.187	0.77	0.47 2	1.256	0.295
H-Waist	0.80 6	0.56 9	1.142	0.226	0.65 6	0.38 3	1.12 5	0.125	0.99 5	0.62 5	1.584	0.983
H-WHI	1.03	0.74 3	1.426	0.86	0.86 3	0.53 8	1.38 4	0.542	1.04 6	0.63 6	1.722	0.859
H-WHR	0.93 3	0.67 3	1.293	0.677	0.95 4	0.59 6	1.52 9	0.846	0.91 2	0.57 9	1.437	0.692
H-%BF	0.91	0.65 5	1.265	0.577	0.95	0.59	1.52 9	0.833	0.84 6	0.53 5	1.34	0.478
H-Insulin	0.89 8	0.54 8	1.472	0.671	0.67 2	0.34 7	1.30 3	0.24	1.30 1	0.60 4	2.802	0.503
H-Glucose	0.90 2	0.33 4	2.436	0.839	0.98 6	0.25 9	3.74 8	0.983	0.76 5	0.16 8	3.476	0.729
H-HOMA	0.99 9	0.61 5	1.623	0.997	0.65 6	0.34 4	1.25 2	0.201	1.64 5	0.76 8	3.526	0.199
H-Cholesterol	1.50 4	0.81 6	2.771	0.189	0.96 8	0.44 7	2.09 4	0.934	2.82 3	0.98 1	8.121	0.046
H-Triglycerides	0.71 7	0.48 1	1.069	0.102	0.5	0.29 1	0.85 9	0.011	1.03 1	0.56 3	1.889	0.921
L-HDL	0.71 7	0.51 3	1.003	0.052	0.58 2	0.34	0.99 5	0.047	0.89 8	0.57 5	1.404	0.638
H-LDL	1.33 3	0.60 8	2.922	0.473	1.13 5	0.42	3.07 1	0.803	1.56 1	0.43 2	5.645	0.495
rs74874270												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.38 7	0.14 6	1.028	0.049	0.27 1	0.06	1.22 7	0.071	0.53	0.14 6	1.923	0.329
H-Waist	0.84 4	0.36 7	1.943	0.691	0.45 3	0.1	2.05 6	0.295	1.31 1	0.44 3	3.878	0.625
H-WHI	0.70 5	0.32 2	1.543	0.38	0.62 2	0.21 9	1.76 4	0.37	0.69 3	0.18 9	2.548	0.581
H-WHR	0.68 6	0.31 3	1.502	0.344	0.46 4	0.14 4	1.49 5	0.19	0.99 6	0.33 7	2.944	0.994
H-%BF	0.83 7	0.39 5	1.773	0.642	0.79 2	0.27 9	2.24 8	0.662	0.87 1	0.29 5	2.576	0.804
H-Insulin	1.52 5	0.47 8	4.863	0.474	0.82 8	0.09	7.59 5	0.868	2.47 8	0.62	9.899	0.187

H-Glucose	1.19 2	0.15 3	9.3	0.867	2.36 6	0.27 6	20.2 56	0.42	0.97 3	0.95 5	0.992	0.53
H-HOMA	1.25 6	0.41 7	3.779	0.686	0.45 5	0.05 7	3.64 3	0.449	2.7	0.70 1	10.39 4	0.135
H-Cholesterol	0.91 7	0.89 5	0.94	0.101	0.89 4	0.85 8	0.93 1	0.184	0.93 9	0.91 2	0.967	0.327
H-Triglycerides	0.26 7	0.06 3	1.138	0.056	0.20 3	0.02 6	1.57 3	0.093	0.36	0.04 6	2.802	0.311
L-HDL	1.37 9	0.65 6	2.896	0.395	1.09 6	0.33 8	3.55 6	0.879	1.78 9	0.62 1	5.153	0.277
H-LDL	0.95 3	0.93 5	0.97	0.223	0.93 8	0.90 9	0.96 7	0.321	0.96 6	0.94 6	0.987	0.471
rs1384331												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.95 1	0.66 3	1.365	0.787	0.88 5	0.52 9	1.48	0.642	1.01	0.60 8	1.678	0.968
H-Waist	0.87 8	0.61 1	1.262	0.483	0.92	0.52 4	1.61 6	0.773	0.86 6	0.53 5	1.401	0.559
H-WHI	0.91 2	0.64 9	1.283	0.598	0.88 6	0.53 9	1.45 6	0.633	0.86 5	0.51 7	1.448	0.582
H-WHR	1.07 6	0.76 4	1.516	0.675	1.15 8	0.70 4	1.90 5	0.565	1.00 7	0.62 7	1.618	0.976
H-%BF	1.00 3	0.71	1.416	0.988	0.93 7	0.56 7	1.54 6	0.799	1.05 1	0.65 2	1.696	0.838
H-Insulin	0.80 3	0.48 1	1.341	0.402	0.71 1	0.35 9	1.40 9	0.33	0.92 3	0.41 7	2.043	0.845
H-Glucose	1.28 3	0.44 6	3.691	0.644	4.19 7	0.51 7	34.0 48	0.147	0.54 4	0.13 3	2.217	0.39
H-HOMA	0.93 7	0.56 4	1.555	0.801	0.68 8	0.35 4	1.33 5	0.269	1.38 4	0.61 2	3.13	0.435
H-Cholesterol	1.37 9	0.70 9	2.683	0.342	0.96 1	0.42 8	2.15 6	0.924	2.69 9	0.75 8	9.606	0.113
H-Triglycerides	0.87 1	0.57 6	1.319	0.516	0.63	0.36 3	1.09 1	0.098	1.30 5	0.67 6	2.52	0.428
L-HDL	1.19 7	0.84	1.706	0.321	1.44	0.80 2	2.58 8	0.222	1.11 4	0.69 8	1.779	0.651
H-LDL	0.89 8	0.40 3	1.998	0.792	1.23 4	0.42 2	3.60 7	0.702	0.54 1	0.15 3	1.912	0.335
rs72679246												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.33 3	0.07 4	1.505	0.134	0.74 5	0.14 2	3.91 2	0.728	0.68 2	0.63	0.738	0.073
H-Waist	0.36 4	0.08 1	1.645	0.172	0.51 2	0.06 1	4.33 3	0.534	0.27 4	0.03 3	2.308	0.205
H-WHI	0.76 1	0.25 2	2.3	0.628	0.56 3	0.12 4	2.56 2	0.453	1.02	0.19 4	5.36	0.982
H-WHR	0.54 1	0.16 8	1.746	0.298	0.54 6	0.10 4	2.86 5	0.47	0.53 7	0.10 2	2.812	0.456
H-%BF	0.41 5	0.12 9	1.34	0.13	0.70 6	0.15 5	3.21 4	0.652	0.19	0.02 3	1.595	0.089

H-Insulin	0.82	0.78 3	0.858	0.106	0.77 2	0.71 5	0.83 5	0.188	0.86 2	0.81 6	0.91	0.33
H-Glucose	6.14 4	1.26 3	29.90 2	0.011	0.96 7	0.94 6	0.98 8	0.627	19.2	3.08 5	119.4 85	0.001
H-HOMA	0.86	0.83	0.89	0.132	0.82 3	0.77 6	0.87 2	0.223	0.89 2	0.85 6	0.929	0.359
H-Cholesterol	0.87 3	0.11 2	6.823	0.897	1.46 4	0.17	12.6 06	0.728	0.93 9	0.91 2	0.967	0.501
H-Triglycerides	0.28 7	0.03 7	2.217	0.203	0.48 6	0.05 7	4.10 5	0.5	0.83	0.78 8	0.874	0.234
L-HDL	1.36 9	0.46 9	4.002	0.565	2.36 4	0.51 6	10.8 32	0.256	0.88 3	0.19 4	4.016	0.873
H-LDL	0.95 4	0.93 7	0.972	0.414	0.93 8	0.91	0.96 7	0.498	0.96 9	0.95	0.989	0.64
rs78563565												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.27 4	0.56 7	2.862	0.558	0.92 6	0.27 2	3.15 6	0.903	1.67 7	0.56 5	4.976	0.349
H- Waist	0.81 6	0.33 7	1.976	0.652	0.59 7	0.12 8	2.79 2	0.51	0.95 7	0.31 3	2.928	0.939
H-WHI	0.84 5	0.37 7	1.893	0.682	0.71 9	0.22 6	2.28 5	0.576	1.03 4	0.31 5	3.39	0.956
H-WHR	0.82 2	0.36 7	1.844	0.635	0.94 4	0.29 2	3.05	0.924	0.72 8	0.23 8	2.224	0.577
H-%BF	0.68 1	0.30 1	1.544	0.356	0.44 3	0.13	1.50 7	0.183	1.00 2	0.32 9	3.057	0.997
H-Insulin	0.99 8	0.32 8	3.038	0.998	1.45 5	0.36 1	5.86 9	0.598	0.55 2	0.06 9	4.429	0.572
H-Glucose	0.97	0.95 7	0.984	0.374	0.96 7	0.94 7	0.98 9	0.527	0.97 3	0.95 5	0.992	0.535
H-HOMA	0.80 2	0.23 5	2.74	0.725	0.93	0.19 7	4.39 8	0.928	0.63 8	0.08 1	5.054	0.67
H-Cholesterol	0.45 8	0.06 1	3.459	0.439	0.80 5	0.1	6.47 1	0.839	0.93 9	0.91 3	0.967	0.344
H-Triglycerides	1.78 9	0.75 9	4.219	0.179	2.22 8	0.68 5	7.25 2	0.174	1.45 1	0.39	5.398	0.578
L-HDL	1.55	0.70 4	3.415	0.274	1.52 9	0.44 7	5.23 8	0.498	1.57 8	0.53 5	4.661	0.407
H-LDL	0.84 2	0.11	6.453	0.868	1.47 7	0.17 9	12.1 66	0.716	0.96 6	0.94 6	0.987	0.487
rs6533498												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.03 9	0.73 5	1.468	0.83	0.78 8	0.48 3	1.28 6	0.341	1.37	0.83 7	2.242	0.211
H- Waist	1.07 4	0.75 8	1.524	0.688	0.74 9	0.43 8	1.28 2	0.293	1.42 6	0.89 3	2.279	0.138
H-WHI	1.08	0.78	1.497	0.644	1.02 9	0.64 4	1.64 6	0.904	1.13 1	0.68 6	1.865	0.63
H-WHR	1.11 1	0.80 1	1.54	0.529	0.92 4	0.57 8	1.47 8	0.744	1.32 1	0.83 7	2.087	0.233

H-%BF	1.15 7	0.83 3	1.609	0.385	0.90 6	0.56 4	1.45 4	0.683	1.45 7	0.91 8	2.313	0.11
H-Insulin	0.76 8	0.46 8	1.261	0.297	0.79 4	0.41	1.53 6	0.495	0.72 7	0.33 9	1.557	0.412
H-Glucose	0.90 2	0.33 4	2.436	0.839	0.69 8	0.18 4	2.65 4	0.597	1.24	0.27 3	5.634	0.781
H-HOMA	0.90 7	0.55 9	1.472	0.693	0.95	0.49 9	1.81	0.878	0.84 9	0.40 3	1.788	0.667
H-Cholesterol	0.71 1	0.39 1	1.294	0.264	0.59 1	0.27 1	1.28 7	0.183	0.92 1	0.35 5	2.386	0.866
H-Triglycerides	0.99 8	0.67	1.486	0.99	1.22 8	0.71 8	2.10 2	0.455	0.75 3	0.41	1.382	0.361
L-HDL	1.11	0.79 4	1.551	0.542	1.32 4	0.77 2	2.27 1	0.308	1.01 1	0.64 7	1.581	0.961
H-LDL	0.71 3	0.32 8	1.549	0.391	0.46	0.16 5	1.28	0.13	1.40 3	0.38 8	5.073	0.605
rs 9997926												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.16 8	0.63 6	2.146	0.617	1.21 3	0.54 4	2.70 4	0.637	1.07 5	0.41 9	2.757	0.881
H- Waist	1.27 9	0.69 8	2.345	0.426	1.49	0.64 1	3.46 1	0.353	1.20 8	0.49 9	2.925	0.676
H-WHI	1.97 5	1.09 8	3.553	0.021	2.35 4	0.96 7	5.73 4	0.054	1.50 6	0.60 8	3.733	0.375
H-WHR	0.94 7	0.52 6	1.703	0.855	1.15	0.52 6	2.51 6	0.727	0.73 7	0.29 9	1.813	0.506
H-%BF	1.24 2	0.67 8	2.275	0.483	1.16 2	0.52 3	2.58 4	0.714	1.28 9	0.50 8	3.272	0.594
H-Insulin	2.1	0.98 5	4.478	0.051	5.71 4	2.03 5	16.0 48	0.001	0.31 7	0.04 1	2.462	0.249
H-Glucose	2.34 4	0.65 1	8.442	0.181	2.75 8	0.54 4	13.9 73	0.204	1.77 9	0.20 9	15.12	0.594
H-HOMA	1.36 1	0.60 8	3.047	0.453	2.21 1	0.85 2	5.73 8	0.097	0.37 5	0.04 9	2.886	0.329
H-Cholesterol	1.32	0.49 7	3.505	0.577	1.55 3	0.49 9	4.83 8	0.446	0.75 3	0.09 5	5.946	0.788
H-Triglycerides	1.06	0.52 7	2.134	0.87	1.46 6	0.63 1	3.40 4	0.373	0.46 2	0.10 5	2.038	0.298
L-HDL	0.96 2	0.52 8	1.754	0.9	1.21 3	0.50 9	2.88 6	0.664	0.88 1	0.37 4	2.075	0.772
H-LDL	2.55 4	0.92 4	7.061	0.062	3.14 1	0.94 9	10.3 92	0.05	1.37 4	0.16 6	11.34 4	0.768
rs 6824447												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	0.87 5	0.61 6	1.242	0.455	0.51 6	0.31 3	0.85	0.009	1.50 9	0.90 8	2.508	0.112
H- Waist	0.94 3	0.66 3	1.343	0.747	0.55 1	0.31 9	0.95 2	0.031	1.38 9	0.86 1	2.242	0.179
H-WHI	0.87 9	0.63 1	1.225	0.447	0.90 5	0.56 1	1.46	0.684	0.88 1	0.53 1	1.462	0.624

H-WHR	0.93 6	0.67 1	1.305	0.696	0.71 1	0.44 1	1.14 5	0.161	1.21 6	0.76 2	1.939	0.413
H-%BF	1.09 7	0.78 3	1.535	0.592	0.88 1	0.54 4	1.42 6	0.608	1.36 9	0.85 3	2.199	0.194
H-Insulin	0.75 5	0.45 9	1.243	0.27	0.81 5	0.41 8	1.58 7	0.549	0.73	0.34 1	1.565	0.42
H-Glucose	0.98 8	0.36 3	2.691	0.982	0.63 2	0.16 6	2.40 3	0.499	1.87 5	0.35 8	9.822	0.452
H-HOMA	0.82 9	0.50 8	1.352	0.453	0.81 4	0.42 4	1.56 3	0.538	0.88 4	0.41 8	1.871	0.748
H-Cholesterol	0.44 7	0.24 2	0.825	0.008	0.26 8	0.11 4	0.62 8	0.001	0.92	0.35 3	2.401	0.866
H-Triglycerides	0.83	0.55 6	1.241	0.365	1.04 6	0.60 8	1.79 8	0.872	0.63 2	0.34 4	1.162	0.139
L-HDL	1.04 9	0.74 6	1.475	0.783	1.04 6	0.60 8	1.79 8	0.872	1.02 1	0.64 6	1.614	0.929
H-LDL	0.43 5	0.19 6	0.968	0.036	0.22 7	0.07 2	0.71 4	0.006	1.11 4	0.30 8	4.031	0.87

rs 17041272

Clinical marker	Total			Men			Women					
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.56 9	1	2.46	0.049	2.06 8	1.11 8	3.82 6	0.019	1.11 9	0.56 8	2.202	0.747
H- Waist	1.11 2	0.69 9	1.769	0.655	2.13 1	1.11 6	4.06 9	0.02	0.62 2	0.31 3	1.24	0.176
H-WHI	1.08 7	0.70 1	1.686	0.709	1.41 7	0.75 5	2.65 9	0.279	0.66 5	0.31 4	1.408	0.286
H-WHR	1.16 5	0.75 2	1.804	0.495	1.63 4	0.88 9	3.00 4	0.113	0.80 8	0.42 5	1.535	0.516
H-%BF	1.79 4	1.13 3	2.839	0.012	1.93 3	1.01 6	3.68	0.043	1.61 9	0.83 7	3.134	0.151
H-Insulin	2.14 7	1.19 8	3.847	0.009	2.10 1	0.96 7	4.56 4	0.058	2.11 3	0.85 8	5.205	0.099
H-Glucose	1.09 7	0.30 9	3.89	0.887	2.38 5	0.57 6	9.87 3	0.218	0.96 9	0.94 8	0.99	0.229
H-HOMA	1.95 6	1.09 6	3.491	0.021	2	0.93 5	4.27 9	0.071	1.80 7	0.72 5	4.5	0.2
H-Cholesterol	1.63 1	0.79 9	3.328	0.76	0.95 6	0.34 6	2.63 7	0.93	3.1	1.10 1	8.73	0.025
H-Triglycerides	1.52 2	0.92 2	2.513	0.099	1.15 5	0.58 3	2.28 6	0.681	2.06 2	0.98 1	4.333	0.053
L-HDL	1.21 9	0.78 1	1.903	0.385	1.15 5	0.58 3	2.28 6	0.681	1.43 3	0.76 3	2.688	0.263
H-LDL	1.48 8	0.58 4	3.789	0.402	0.98 7	0.27 3	3.56 8	0.984	2.52 2	0.62 8	10.13	0.179

ELOVL7

rs75621404												
Clinical marker	Total			Men			Women					
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.12 9	0.37 3	3.415	0.83	1.92 5	0.54 3	6.81 7	0.304	0.68 1	0.63	0.736	0.174

H- Waist	0.36 7	0.08 1	1.659	0.176	0.33 3	0.04 1	2.67 9	0.38	0.57 1	0.05 9	5.56	0.627
H-WHI	1.84 9	0.63 3	5.398	0.255	1.74 3	0.44 1	6.88 1	0.424	0.85 9	0.08 8	8.371	0.896
H-WHR	1.80 1	0.61 7	5.259	0.126	1.35	0.38 2	4.77 2	0.641	4.05 5	0.41 7	39.43 1	0.194
H-%BF	1.22 2	0.40 6	3.683	0.721	0.92	0.26	3.25 4	0.898	2.35 8	0.21 1	26.29 5	0.474
H-Insulin	0.82 3	0.17 9	3.792	0.803	0.97	0.19 4	4.84 3	0.971	0.85 9	0.81 4	0.906	0.421
H-Glucose	0.97 1	0.95 7	0.985	0.518	0.96 8	0.94 7	0.98 9	0.564	0.97 4	0.95 6	0.992	0.745
H-HOMA	0.47 7	0.06 2	3.702	0.47	0.51 9	0.06 4	4.20 8	0.534	0.89 3	0.85 8	0.929	0.49
H-Cholesterol	0.9	0.11 5	7.031	0.92	0.98 8	0.12 1	8.09	0.991	0.94 1	0.91 5	0.968	0.619
H-Triglycerides	1.59 7	0.49 2	5.181	0.433	1.31 7	0.33 1	5.23 5	0.696	1.75 5	0.17 9	17.22 2	0.626
L-HDL	0.98 2	0.32 5	2.969	0.975	0.73 9	0.15 3	3.56 4	0.707	3.53 2	0.36 3	34.33 3	0.248
H-LDL	1.65 1	0.20 8	13.10 4	0.632	1.81 3	0.21 6	15.2 03	0.58	0.96 7	0.94 8	0.987	0.715
rs1563517												
	Total				Men				Women			
Clinical marker	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value
H-BMI	1.09 2	0.75 2	1.585	0.646	1.09 5	0.64 1	1.87 1	0.74	1.09 9	0.65 3	1.852	0.723
H- Waist	1.51 7	1.04 9	2.194	0.027	1.23 8	0.69 3	2.21	0.472	1.71 6	1.05 1	2.801	0.03
H-WHI	1.21 3	0.85 3	1.724	0.283	0.94	0.56 1	1.57 5	0.816	1.80 6	1.07 5	3.033	0.025
H-WHR	1.13 2	0.79 5	1.613	0.492	1.11 9	0.66 7	1.87 5	0.672	1.14 5	0.70 4	1.861	0.586
H-%BF	0.99	0.69 4	1.413	0.957	0.93 9	0.55 8	1.58 1	0.814	1.05 9	0.64 9	1.726	0.819
H-Insulin	1.84 4	1.10 7	3.074	0.018	1.26 7	0.62 2	2.58 2	0.516	3.12 6	1.44 1	6.778	0.003
H-Glucose	2.05 7	0.78 1	5.42	0.137	2.01 5	0.52 7	7.69 9	0.298	2.14 6	0.52 6	8.762	0.278
H-HOMA	1.36 1	0.82 1	2.258	0.232	1.00 9	0.49 6	2.05 4	0.981	2.08 3	0.98 2	4.418	0.052
H-Cholesterol	0.85 5	0.44	1.661	0.643	0.48 1	0.17 7	1.30 6	0.144	1.73 9	0.66 5	4.551	0.256
H-Triglycerides	1.09 7	0.71 4	1.683	0.674	0.84 6	0.46 4	1.54 1	0.586	1.56	0.83 3	2.922	0.164
L-HDL	1.22 9	0.85 8	1.76	0.26	1.11 1	0.62	1.98 9	0.725	1.25 8	0.78 1	2.028	0.347
H-LDL	0.95	0.40 8	2.212	0.906	1.02 6	0.35	3.00 8	0.963	0.89 7	0.22 7	3.544	0.877
rs12188996												
	Total				Men				Women			
	OR	95% CI		p-value	OR	95% CI		p-value	OR	95% CI		p-value

Clinical marker	0.57 4	0.11 8	2.792	0.487	0.46 1	0.05 1	4.18 5	0.483	0.72 8	0.07 5	7.088	0.784
H- Waist	0.27 5	0.03 4	2.213	0.195	0.75	0.08 2	6.82 3	0.799	0.62 9	0.57 7	0.686	0.127
H-WHI	0.38 8	0.08	1.881	0.224	0.48 6	0.08	2.95 2	0.425	0.71 9	0.67	0.771	0.213
H-WHR	0.67	0.16 6	2.705	0.572	0.33 1	0.03 7	3.00 2	0.304	1.35 4	0.18 8	9.744	0.763
H-%BF	0.78 3	0.17 4	3.53	0.75	0.30 5	0.03 1	2.96 9	0.281	2.36 1	0.21 2	26.32 7	0.474
H-Insulin	0.73 9	0.08 8	6.229	0.781	0.76 4	0.70 7	0.82 6	0.339	2.08 9	0.21	20.74 6	0.523
H-Glucose	0.97 1	0.95 7	0.985	0.605	0.96 8	0.94 8	0.98 9	0.686	0.97 4	0.95 6	0.992	0.744
H-HOMA	0.76 7	0.09 5	6.218	0.803	1.15 9	0.12 6	10.6 23	0.897	0.89 2	0.85 7	0.929	0.489
H-Cholesterol	1.50 3	0.18 4	12.28 4	0.703	0.9	0.86 6	0.93 6	0.459	5.64 7	0.55 7	57.20 1	0.1
H-Triglycerides	1.13 3	0.23 2	5.526	0.877	0.75 4	0.08 3	6.85 5	0.802	1.78 5	0.18 2	17.52	0.616
L-HDL	0.88 9	0.22	3.59	0.861	0.73 9	0.08 1	6.72 5	0.789	1.17 9	0.16 4	8.475	0.871
H-LDL	2.69 2	0.32 5	22.33 4	0.341	0.94	0.91 2	0.96 8	0.572	10.9 63	1.03 7	115.9 15	0.013
rs60258111												
	Total				Men			Women				
Clinical marker	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
H-BMI	1.22 2	0.28 9	5.169	0.785	5.74 7	0.59	56.0 07	0.09	0.68 4	0.63 3	0.739	0.176
H- Waist	1.35 8	0.32 1	5.746	0.677	3.07 2	0.42 5	22.2 24	0.244	0.58 4	0.06	5.684	0.641
H-WHI	0.81 1	0.19 2	3.427	0.776	2.20 4	0.22 6	21.4 48	0.487	0.71 7	0.66 7	0.77	0.211
H-WHR	1.33 6	0.33 1	5.395	0.684	4.05 9	0.41 7	39.5 05	0.194	0.44	0.04 5	4.28	0.469
H-%BF	0.84 1	0.22 4	3.166	0.799	2.78 6	0.28 6	27.1 19	0.359	0.29 6	0.03 3	2.679	0.252
H-Insulin	1.47 8	0.15 2	14.40 5	0.736	1.65 6	0.14 7	18.6 83	0.682	0.85 8	0.81 3	0.906	0.686
H-Glucose	0.97 1	0.95 7	0.985	0.604	0.96 8	0.94 8	0.98 9	0.713	0.97 4	0.95 6	0.992	0.718
H-HOMA	0.85 7	0.82 8	0.888	0.233	0.81 9	0.77 3	0.86 8	0.35	0.89 1	0.85 5	0.928	0.436
H-Cholesterol	3.42 2	0.69 1	16.96 1	0.11	3.02 4	0.30 4	30.0 57	0.323	4.19 1	0.44 4	39.57 7	0.176
H-Triglycerides	0.47 8	0.05 9	3.861	0.48	0.99 1	0.10 1	9.67 6	0.994	0.83 4	0.79 4	0.877	0.322
L-HDL	0.89	0.22	3.597	0.871	0.74 5	0.69 5	0.79 7	0.244	1.78 3	0.29 4	10.82 2	0.526
H-LDL	2.68 3	0.32 3	22.25 4	0.342	0.94	0.91 2	0.96 8	0.614	8.13 9	0.82 5	80.33	0.034
rs16878426												
	Total				Men			Women				

Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	0.66 1	0.62 4	0.701	0.018	0.64 1	0.58 7	0.7	0.069	0.68 9	0.62 0.735	0.127	
H- Waist	0.21 9	0.02 8	1.72	0.113	0.74 6	0.69 7	0.79 9	0.156	0.42 6	0.04 7	3.862	0.437
H-WHI	0.77 7	0.22 5	2.685	0.69	0.72 8	0.14 4	3.67 3	0.701	0.64 1	0.07 1	5.819	0.692
H-WHR	0.56 3	0.51	0.622	0.004	0.55 9	0.50 4	0.62 1	0.031	0.56 3	0.51	0.622	0.051
H-%BF	0.38 2	0.1	1.454	0.144	0.44 7	0.08 1	2.48 3	0.347	0.28 7	0.03 2	2.599	0.239
H-Insulin	0.55 4	0.06 8	4.498	0.576	0.76 2	0.70 4	0.82 4	0.215	2.11 1	0.21 3	20.96 6	0.516
H-Glucose	0.97 1	0.95 8	0.985	0.568	0.96 8	0.94 8	0.98 9	0.657	0.97 4	0.95 6	0.992	0.715
H-HOMA	0.77 2	0.09 5	6.258	0.808	0.81 9	0.77 3	0.86 8	0.297	2.87 8	0.29	28.54 7	
H-Cholesterol	0.92	0.89 8	0.942	0.329	0.89 7	0.86 2	0.93 3	0.408	0.94 1	0.91 5	0.968	0.347
H-Triglycerides	0.86 5	0.18 4	4.055	0.854	0.74 4	0.69 4	0.79 7	0.153	3.58 3	0.58 3	22.01 7	0.143
L-HDL	1.01 1	0.29 3	3.493	0.987	0.74 4	0.69 4	0.79 7	0.153	4.74 3	0.52 4	42.92 5	0.128
H-LDL	0.95 4	0.93 7	0.971	0.467	0.94	0.91 2	0.96 8	0.536	0.96 7	0.94 8	0.987	0.682
rs6872863												
	Total				Men				Women			
Clinical marker	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value			
H-BMI	1.21 2	0.83 9	1.75	0.306	1.11 5	0.66 1	1.88 1	0.685	1.3 5	0.77 2.18	0.321	
H- Waist	1.06 8	0.74	1.541	0.726	1.11 4	0.62 5	1.98 3	0.716	1.08 6	0.67	1.761	0.739
H-WHI	1.09 4	0.77 7	1.541	0.606	1.41 4	0.86	2.32 4	0.173	0.74 8	0.44 9	1.246	0.265
H-WHR	1.22 6	0.86 8	1.731	0.247	1.17 1	0.70 9	1.93 2	0.539	1.27 9	0.79 4	2.06	0.313
H-%BF	1.30 2	0.92 2	1.839	0.134	1.38 7	0.83 9	2.29 1	0.203	1.20 9	0.75 1	1.948	0.436
H-Insulin	0.88 6	0.53	1.484	0.647	0.80 6	0.40 1	1.62	0.547	0.90 8	0.41 6	1.982	0.81
H-Glucose	1.19	0.40 8	3.473	0.75	0.59 5	0.15 6	2.27	0.445	3.63 8	0.43 2	30.60 8	0.205
H-HOMA	1.11 4	0.66 6	1.864	0.682	1.23 1	0.60 8	2.49 2	0.565	0.92 7	0.43 1	1.992	0.846
H-Cholesterol	0.82 5	0.44 5	1.53	0.543	0.91 2	0.40 6	2.04 7	0.824	0.65 1	0.24 4	1.737	0.389
H-Triglycerides	0.72 5	0.48 2	1.09	0.121	0.63 8	0.36 7	1.11	0.111	0.78 7	0.42 5	1.457	0.446
L-HDL	0.95 7	0.67 5	1.357	0.805	0.74 9	0.42 9	1.30 9	0.311	1.22 2	0.76 8	1.943	0.398
H-LDL	0.48 3	0.22 3	1.048	0.061	0.40 6	0.15 1	1.08 9	0.066	0.58 2	0.16 5	2.055	0.397
rs76641655												

Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	1.008	0.373	2.728	0.988	0.927	0.227	3.79	0.916	1.092	0.267	4.464	0.902
H- Waist	0.63	0.205	1.941	0.418	0.371	0.046	3.022	0.337	0.859	0.211	3.504	0.833
H-WHI	0.514	0.181	1.46	0.204	0.908	0.239	3.456	0.888	0.712	0.663	0.766	0.058
H-WHR	0.84	0.321	2.198	0.722	0.654	0.16	2.669	0.553	1.065	0.28	4.044	0.927
H-%BF	0.826	0.321	2.125	0.693	0.726	0.191	2.762	0.638	0.933	0.246	3.547	0.92
H-Insulin	0.29	0.038	2.232	0.207	0.403	0.049	3.308	0.385	0.857	0.812	0.905	0.283
H-Glucose	2.077	0.26	16.579	0.482	0.968	0.947	0.989	0.586	5.268	0.578	48.013	0.101
H-HOMA	0.38	0.05	2.908	0.334	0.574	0.076	4.706	0.602	0.891	0.856	0.928	0.326
H-Cholesterol	0.684	0.089	5.257	0.714	1.121	0.135	9.291	0.916	0.94	0.914	0.967	0.452
H-Triglycerides	2.579	0.978	6.798	0.048	1.522	0.371	6.248	0.559	4.452	1.152	17.204	0.019
L-HDL	1.435	0.558	3.691	0.453	1.522	0.371	6.248	0.559	1.466	0.386	5.565	0.574
H-LDL	0.954	0.937	0.971	0.35	0.939	0.911	0.968	0.447	0.967	0.947	0.987	0.58
rs114011218												
Clinical marker	Total				Men			Women				
	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
H-BMI	0.179	0.023	1.393	0.065	0.641	0.587	0.7	0.069	0.43	0.05	3.73	0.432
H- Waist	0.663	0.18	2.438	0.534	1.529	0.274	8.53	0.627	0.281	0.033	2.366	0.215
H-WHI	0.403	0.11	1.479	0.157	0.728	0.144	3.673	0.701	0.714	0.665	0.767	0.096
H-WHR	0.823	0.266	2.547	0.736	0.653	0.118	3.624	0.625	0.996	0.219	4.529	0.996
H-%BF	0.686	0.192	2.457	0.561	0.601	0.099	3.654	0.578	0.776	0.128	4.714	0.783
H-Insulin	0.563	0.069	4.572	0.587	0.768	0.711	0.83	0.275	1.575	0.17	14.573	0.688
H-Glucose	0.971	0.957	0.985	0.534	0.968	0.948	0.989	0.657	0.974	0.956	0.992	0.665
H-HOMA	0.566	0.072	4.451	0.585	1.198	0.131	10.981	0.874	0.892	0.856	0.928	0.359
H-Cholesterol	0.976	0.124	7.677	0.982	0.897	0.862	0.933	0.408	2.814	0.32	24.712	0.332
H-Triglycerides	1.175	0.318	4.336	0.809	0.592	0.068	5.149	0.632	2.133	0.402	11.316	0.364
L-HDL	1.116	0.361	3.455	0.849	0.747	0.698	0.8	0.157	2.968	0.567	15.534	0.179
H-LDL	1.792	0.224	14.306	0.578	0.94	0.912	0.968	0.536	5.463	0.594	50.222	0.094

rs115159664												
Clinical marker	Total				Men			Women				
	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value
H-BMI	0.62	0.22 4	1.718	0.355	0.45 4	0.09 4	2.17 9	0.314	0.81 1	0.21	3.128	0.762
H- Waist	0.89	0.34	2.331	0.813	0.32 9	0.04 1	2.64	0.273	1.45 8	0.43 5	4.891	0.541
H-WHI	0.83 2	0.34	2.039	0.688	0.47 3	0.13 1	1.71 5	0.246	1.49 8	0.42 7	5.253	0.527
H-WHR	0.65 4	0.26	1.644	0.364	0.32	0.06 7	1.53 6	0.136	1.11 1	0.33 2	3.723	0.865
H-%BF	0.68 4	0.27 5	1.699	0.411	0.10 8	0.01 3	0.87 9	0.012	2.10 3	0.60 2	7.343	0.236
H-Insulin	1.23 5	0.33 6	4.536	0.751	0.46 3	0.05 6	3.86 8	0.47	3.25 9	0.57 1	18.59 9	0.162
H-Glucose	1.75 6	0.22 2	13.90 3	0.59	0.96 8	0.94 7	0.98 9	0.565	4.18 6	0.46 9	37.32 7	0.165
H-HOMA	0.64 4	0.14 7	2.824	0.558	0.81 6	0.76 9	0.86 6	0.136	1.93 9	0.39 9	9.409	0.405
H-Cholesterol	2.92 7	0.94 3	9.086	0.052	0.99 2	0.12 1	8.12 2	0.994	7.12 5	1.71 4	29.62 1	0.002
H-Triglycerides	0.40 2	0.09 2	1.749	0.21	0.74 1	0.69 1	0.79 4	0.063	1.16 7	0.24 4	5.568	0.847
L-HDL	0.70 1	0.26 8	1.834	0.468	2.05 9	0.56 4	7.51 2	0.266	0.24 7	0.05 3	1.164	0.057
H-LDL	3.84 7	1.06	13.95 9	0.028	1.81 9	0.21 7	15.2 61	0.577	8.11 1	1.50 3	43.76	0.004

rs4700398												
Clinical marker	Total				Men			Women				
	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value	OR	95% CI		<i>p</i> -value
H-BMI	1.57	1.10 9	2.221	0.011	1.27 2	0.77 9	2.07 8	0.337	1.96 4	1.19 6	3.225	0.007
H- Waist	1.29 9	0.91 6	1.841	0.142	1.24 1	0.72 5	2.12 4	0.433	1.31 5	0.82 5	2.094	0.25
H-WHI	0.98 5	0.71	1.365	0.926	1.15 3	0.72	1.84 8	0.555	0.89 5	0.54 3	1.473	0.663
H-WHR	1.43 8	1.03 6	1.996	0.03	1.35 8	0.84 7	2.17 7	0.204	1.51 7	0.96	2.396	0.074
H-%BF	1.47 3	1.05 8	2.051	0.022	1.44 1	0.89 4	2.32 3	0.134	1.52 2	0.95 9	2.415	0.074
H-Insulin	1.06	0.64 5	1.742	0.819	0.89 8	0.46 1	1.74 9	0.754	1.32	0.61 6	2.828	0.477
H-Glucose	0.75	0.28 2	1.998	0.565	0.55 7	0.13 7	2.27 3	0.411	1.03 4	0.25 4	4.21	0.963
H-HOMA	1.2	0.73 9	1.95	0.462	0.98 2	0.51 5	1.87 4	0.957	1.65 8	0.77 4	3.554	0.192
H-Cholesterol	1.08 7	0.59 6	1.985	0.785	1.24 2	0.57 6	2.68	0.589	0.91 4	0.34 3	2.433	0.857
H-Triglycerides	1.03 5	0.69 4	1.544	0.865	1.22 8	0.71 8	2.10 1	0.455	0.85 8	0.46 8	1.575	0.623
L-HDL	1.00 4	0.71 8	1.404	0.981	0.78 1	0.45 4	1.34 2	0.372	1.14 8	0.73 4	1.797	0.546

H-LDL	1.00 3	0.46 3	2.173	0.993	1.00 9	0.37 8	2.69 3	0.986	1.03 4	0.29 3	3.646	0.959
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H-BMI: High Body Mass Index >25.0 kg/m²; H-WC: High Waist circumference (Women >0.80 cm and Men >90 cm); H-WHI: High Waist-Hip Index (Women >0.85 cm and Men >95 cm); H-WHR: High Waist-Height Ratio >0.50; H-%BF: High Body Fat percent (Women >35% and Men >20%). H-Glucose: High glucose; > 100 mg/dL; H-INS: High Insulin (>14 μU/ml for women and > 11μU/ml for men); H-HOMA: High HOMA index (>2.9 for women and >2.3 for men); H-Cholesterol: High total cholesterol (>200 mg/dL); H-LDL: Elevated low-density lipoproteins (>130 mg/dL); L-HDL: Low high-density lipoproteins (≤50 mg/dL for women and ≤40 mg/dL for men); H-Triglycerides : High triglycerides (>150 mg/dL). The statistical analysis applied to this dataset was a multinomial regression (p=<0.05).