

Determinants/factors	ΔSHBG=1.38±9.3								
	Unadjusted model			Age-adjusted		Multi-adjusted (Full model)		LASSO regression	
	Mean difference ± SD	Standardized β	P-value	Standardized β	P-value	Standardized β	P-value	Standardized β	P-value
Demographic, behavioural & anthropometric factors									
Δ Age , Years	4.6 ± 0.6	0.218	<0.001	-	-	0.000	0.999	-	-
Δ Physical activity	148.7 ± 2346.9	0.035	0.450	0.035	0.457	0.032	0.524	-	-
Δ Abdominal total fat mass (%)	-2401.8 ± 894.6	-0.063	0.100	-0.063	0.098	-0.045	0.369	-	-
Blood chemistry & hormones									
Δ Triglycerides (mmol/L)	-0.053 ± 1.53	-0.028	0.275	-0.030	0.242	-0.157	0.002	-0.165	0.001
Δ Glucose (mmol/L)	0.328 ± 1.257	0.020	0.440	-0.002	0.944	-0.007	0.888	-	-
Δ Insulin (μIU/mL) ^a	-1.2 ± 7.8	-0.058	0.101	-0.060	0.095	0.008	0.876	-	-
Δ ALT activity (U/L) ^b	-2.0 ± 19.7	0.002	0.950	0.003	0.929	0.083	0.106	-	-
Δ fT4 (pmol/L)	1.8 ± 3.3	-0.003	0.919	0.061	0.026	0.159	0.002	0.173	0.001
Δ TT (nmol/L)	-0.631 ± 4.3	0.333	<0.001	0.348	<0.001	0.406	<0.001	0.403	<0.001
Δ E2 (pmol/L) ^c	-9.3 ± 39.9	0.074	0.033	0.057	0.107	-0.114	0.035	-0.110	0.038
Inflammatory markers									
Δ IL-6 (pg/mL)	0.047 ± 1.9	-0.063	0.017	-0.074	0.004	-0.119	0.019	-0.109	0.028
Δ TNF-α (pg/mL)	0.137 ± 2.9	-0.079	0.003	-0.072	0.005	0.041	0.423	-	-
Δ MPO activity (μg/L)	-26.7 ± 329.1	0.004	0.893	-0.005	0.849	0.060	0.249	-	-
Δ eSel (ng/mL)	-0.218 ± 11.4	-0.032	0.277	-0.036	0.164	-0.022	0.676	-	-