

Extended Data 4. Blood factors that increased significantly after both aerobic training and resistance training

Blood factor	Unit	All (<i>n</i> = 56)			AT (<i>n</i> = 26)			RT (<i>n</i> = 30)			Change (Δ)		
		Before	After	<i>p</i> value	Before	After	<i>p</i> value	Before	After	<i>p</i> value	AT	RT	<i>p</i> value ^a
IL-26	FI ^b	4.97 ± 0.69	7.25 ± 0.87	< 0.001	5.65 ± 1.36	8.92 ± 1.34	< 0.01	4.38 ± 0.54	5.80 ± 1.10	< 0.05	+3.27 ± 1.00	+1.42 ± 1.00	0.20
Osteocalcin	ng/mL	3.79 ± 0.27	4.46 ± 0.30	< 0.0001	3.84 ± 0.50	4.29 ± 0.53	< 0.01	3.76 ± 0.27	4.62 ± 0.33	< 0.001	+0.60 ± 0.30	+0.71 ± 0.30	0.78
Osteopontin	ng/mL	15.51 ± 0.75	18.63 ± 0.91	< 0.001	16.21 ± 1.36	19.76 ± 1.46	< 0.01	14.92 ± 0.76	17.66 ± 1.13	< 0.01	+3.55 ± 0.99	+2.74 ± 0.99	0.61
Ghrelin	FI ^b	144.63 ± 43.85	356.91 ± 63.44	< 0.0001	194.22 ± 86.20	340.72 ± 98.53	< 0.05	101.66 ± 33.45	370.93 ± 83.56	< 0.001	+146.50 ± 80.54	+269.28 ± 80.54	0.29
ANGPTL6	ng/mL	4.67 ± 0.26	5.28 ± 0.30	< 0.01	4.38 ± 0.33	4.85 ± 0.42	< 0.05	4.91 ± 0.40	5.66 ± 0.43	< 0.05	+0.46 ± 0.30	+0.76 ± 0.30	0.44
Angiopoietin-2	ng/mL	1.81 ± 0.09	2.10 ± 0.12	< 0.0001	1.79 ± 0.15	2.13 ± 0.21	< 0.01	1.83 ± 0.12	2.08 ± 0.13	< 0.001	+0.34 ± 0.06	+0.24 ± 0.06	0.44
Synuclein-α	pg/mL	490.64 ± 15.82	689.89 ± 23.82	< 0.0001	486.17 ± 16.53	679.71 ± 43.88	< 0.001	494.50 ± 26.09	698.72 ± 23.77	< 0.0001	+193.54 ± 31.45	+204.21 ± 31.45	0.84
TGF-α	FI ^b	20.94 ± 0.38	22.25 ± 0.48	< 0.01	21.02 ± 0.60	22.19 ± 0.75	< 0.05	20.87 ± 0.48	22.30 ± 0.63	< 0.05	+1.17 ± 0.71	+1.43 ± 0.71	0.77
CCL14/HCC-1/HCC-3	ng/mL	42.03 ± 1.07	44.81 ± 0.97	< 0.0001	39.47 ± 1.62	42.88 ± 1.47	< 0.001	44.24 ± 1.31	46.49 ± 1.23	< 0.01	+3.41 ± 0.81	+2.25 ± 0.81	0.34
Glu	μM	43.10 ± 1.60	51.57 ± 2.31	< 0.001	41.44 ± 1.84	52.57 ± 3.80	< 0.01	44.55 ± 2.52	50.70 ± 2.82	< 0.05	+10.81 ± 2.49	+5.60 ± 2.49	0.25
Homocitrulline	μM	0.16 ± 0.01	0.19 ± 0.01	< 0.001	0.16 ± 0.01	0.18 ± 0.02	< 0.05	0.16 ± 0.01	0.19 ± 0.02	< 0.01	+0.26 ± 0.07	+0.11 ± 0.07	0.22
SDMA	μM	0.34 ± 0.01	0.38 ± 0.01	< 0.0001	0.34 ± 0.01	0.38 ± 0.01	< 0.01	0.34 ± 0.01	0.38 ± 0.01	< 0.01	+0.20 ± 0.09	+0.35 ± 0.09	0.26
Urea	μM	2100.02 ± 54.71	2280.97 ± 55.84	< 0.001	2094.63 ± 84.06	2247.97 ± 84.58	< 0.10	2104.70 ± 72.90	2309.57 ± 75.04	< 0.01	+82.73 ± 68.78	+172.78 ± 68.78	0.35

Values show the means ± standard errors (SEs). The change value was calculated by subtracting the baseline value measured before the training intervention from the value measured after the training intervention. Statistical analyses were performed with two-sided paired *t* tests for the intragroup difference, ^atwo-sided independent *t* tests for the intergroup difference, and ^bWilcoxon signed-rank sum tests for the intragroup difference in the FI value. AT, aerobic training; FI, fluorescence intensity; RT, resistance training