

Table S1. Baseline characteristics of the study population according to sex

Characteristics	Male, N=490	Female, N=589	P
Age (years)	42.76±0.62	43.20±0.56	NS
BMI (kg/m ²)	27.53±0.19	28.39±0.23	0.005
Waist circumference (cm)	96.22±0.51	94.04±0.60	0.007
FM/WT (kg/kg)	0.25±0.002	0.36±0.003	0.001
SMM/WT (kg/kg)	0.37±0.002	0.27±0.001	0.001
TBW (L)	45.28±0.26	33.44±0.16	0.001
ECW	0.86±0.007	0.99±0.007	0.001
GDF-15 (pg/ml)	520.47±14.69	460.73±13.10	0.002
Follistatin (pg/ml)	612.26±21.37	619.21±23.16	NS
Chemerin (ng/ml)	88.41±1.24	90.41±1.17	NS
Leptin (ng/ml)	11.43±0.47	33.60±0.92	0.001
Adiponectin (µg/ml)	3.36±0.06	4.48±0.07	0.001
L/A ratio	3.93±0.18	8.76±0.29	0.001
Lymphocytes (×10 ⁹ /L)	2.40±0.03	2.09±0.02	0.00001
PT	1.04±0.02	0.98±0.01	0.01
CRP (mg/L)	1.26±0.19	1.19±0.15	NS
SIRI	0.87±0.02	0.70±0.01	1.11×10 ⁻⁹

Data presented as mean, standard errors; N, sample size; BMI, body mass index; FM/WT, fat mass/weight ratio; SMM/WT, skeletal muscle mass/weight ratio; TBW, total body water; ECW, extracellular water; GDF-15, growth differentiation factor-15; L/A ratio, leptin/adiponectin ratio; PT, prothrombin time; CRP, C-reactive protein, SIRI, systemic inflammation response index. P# shows significance levels achieved upon comparing sexes by t-test, NS, non-significant.

Table S2. Pearson correlations between measurements of body composition and plasma levels of soluble markers in the study population by sex; male correlations are shown above the diagonal and female below. All the variables were adjusted for age prior to the analysis.

	BMI	Waist	FM/WT	SMM/WT	ECW	GDF-15	Chemerin	Adiponectin	Follistatin	Leptin	L/A ratio	SIRI
BMI		0.87 ²	0.76 ²	-0.77 ²	0.58 ²	0.18 ²	0.34 ²	-0.16 ²	0.06 ⁿ	0.67 ²	0.58 ²	0.03 ⁿ
Waist	0.88 ²		0.78 ²	-0.79 ²	0.66 ²	0.25 ²	0.36 ²	-0.12 ²	0.08 ⁿ	0.54 ²	0.64 ²	0.03 ⁿ
FM/WT	0.86 ²	0.83 ²		-0.96 ²	0.48 ²	0.25 ²	0.33 ²	-0.07 ¹	0.04 ⁿ	0.55 ²	0.66 ²	0.06 ⁿ
SMM/WT	-0.80 ²	-0.80 ²	-0.94 ²		-0.42 ²	-0.32 ²	-0.34 ²	0.09 ¹	-0.05 ⁿ	-0.52 ²	-0.67 ²	-0.07 ⁿ
ECW	0.67 ²	0.65 ²	0.65 ²	-0.49 ²		0.23 ²	0.28 ²	0.04 ⁿ	0.03 ⁿ	0.38 ²	0.33 ²	0.04 ⁿ
GDF-15	0.42 ²	0.45 ²	0.39 ²	-0.44 ²	0.37 ²		0.27 ²	-0.03 ⁿ	0.09 ⁿ	0.15 ²	0.17 ²	0.17 ²
Chemerin	0.48 ²	0.46 ²	0.44 ²	-0.46 ²	0.33 ²	0.44 ²		-0.06 ⁿ	0.16 ²	0.35 ²	0.38 ²	0.06 ⁿ
Adiponectin	-0.15 ²	-0.14 ²	-0.06 ⁿ	0.06 ⁿ	-0.01 ⁿ	0.02 ⁿ	-0.02 ⁿ		-0.01 ⁿ	0.04 ⁿ	-0.42 ²	-0.03 ⁿ
Follistatin	0.17 ²	0.18 ²	0.17 ²	-0.19 ²	0.14 ²	0.25 ²	0.30 ²	0.06 ⁿ		-0.00 ⁿ	0.00 ⁿ	0.06 ⁿ
Leptin	0.61 ²	0.57 ²	0.63 ²	-0.59 ²	0.42 ²	0.36 ²	0.47 ²	0.01 ⁿ	0.11 ¹		0.73 ²	-0.01
L/A ratio	0.59 ²	0.57 ²	0.60 ²	-0.59 ²	0.34 ²	0.27 ²	0.41 ²	-0.45 ²	0.09 ¹	0.77 ²		-0.00 ⁿ
SIRI	0.03 ⁿ	0.01 ⁿ	0.08 ⁿ	-0.04 ⁿ	0.06 ⁿ	0.02 ⁿ	0.03 ⁿ	-0.09 ¹	0.03 ⁿ	0.07 ⁿ	0.09 ⁿ	