

Table S1. Descriptive statistics (means \pm s.e.m) of weight, speed, metabolic values and water loss in both sexes. Results of statistical analyses can be found in the Table 1.

	Female	Male
Temperature ($^{\circ}$ C)	25	25
n	10	10
Weight before walking (mg)	99.68 \pm 5.17	72.88 \pm 5.6
Weight loss (mg)	19.78 \pm 1.49	13.19 \pm 1.94
Weight loss rate (mg/min)	1.47 \pm 0.14	0.992 \pm 0.165
RMR (μ l CO ₂ /h)	23.88 \pm 1.54	17.83 \pm 1.82
Mass-dependent RMR (μ l CO ₂ /h/mg)	0.242 \pm 0.009	0.237 \pm 0.007
RMR (J/h)	0.574 \pm 0.037	0.429 \pm 0.043
Mass-dependent RMR (J/h/mg)	0.00583 \pm 0.0002	0.0057 \pm 0.0002
Speed (cm/s)	0.596 \pm 0.041	0.594 \pm 0.013
Walking metabolic rate (μ l CO ₂ /h)	35.42 \pm 1.53	28.40 \pm 1.87
Mass-dependent Walking metabolic rate (μ l CO ₂ /h/mg)	0.364 \pm 0.013	0.401 \pm 0.03
Walking metabolic rate (J/h)	0.852 \pm 0.037	0.683 \pm 0.045
Mass-dependent Walking metabolic rate (J/h/mg)	0.00877 \pm 0.0003	0.00965 \pm 0.0007
GCOT (J/Kg/m)	421.05 \pm 34.31	457.48 \pm 28.28
NCOT (J/Kg/m)	138.7 \pm 19.75	179.52 \pm 27.7
Recovery metabolic rate (μ l CO ₂ /h)	21.6 \pm 1.37	18.91 \pm 1.68
Mass-dependent Recovery metabolic rate (μ l CO ₂ /h/mg)	0.228 \pm 0.01	0.266 \pm 0.028
Recovery metabolic rate (J/h)	0.519 \pm 0.033	0.782 \pm 0.18
Mass-dependent Recovery metabolic rate (J/h/mg)	0.00549 \pm 0.0002	0.0117 \pm 0.003
Resting WLR (mg/h)	2.003 \pm 0.211	1.65 \pm 0.14
Resting mass-dependent WLR (mg/h/mg)	0.0215 \pm 0.003	0.0239 \pm 0.025
Walking WLR (mg/h)	4.8 \pm 1.1	4.5 \pm 0.82
Walking Mass-dependent WLR (mg/h/mg)	0.0538 \pm 0.015	0.065 \pm 0.011
Recovery WLR (mg/h)	2.426 \pm 0.32	1.55 \pm 0.11
Recovery Mass-dependent WLR (mg/h/mg)	0.0245 \pm 0.003	0.0234 \pm 0.004