

Table S1. A correlation study between the endurance running capacity and several key organ masses in an unselected population of heterogenous N:NIH rats. Values represent the range (minimum, median, and maximum), mean, and standard deviations for each trait.

N:NIH Unselected females	n	Min	Med	Max	Mean	STD	r	p value
Endurance Capacity (m)	47	270	688.9	1364	743.7	273.00		
Body Mass. (g)	47	162	210	240	208.7	19.21	-0.21	0.15
Visceral Fat (g/kg bw)	47	0.17	0.40	1.00	0.45	0.21	-0.30	0.04
Heart Mass (g/kg bw)	47	0.29	0.36	0.42	0.36	0.03	0.22	0.13
Liver Mass (g/ kg bw)	47	4.08	5.02	5.92	5.02	0.33	0.10	0.52
Stomach (g/kg bw)	46	0.40	0.49	0.62	0.50	0.05	-0.10	0.51
Rt. Kidney Mass (g/kg bw)	45	0.39	0.47	0.60	0.47	0.04	0.25	0.10
Lft. Kidney Mass (g/kg bw))	46	0.39	0.46	0.83	0.48	0.07	0.07	0.64
Sm. Intest. Mass (g/kg/ bw)	47	1.99	2.42	2.90	2.45	0.20	-0.16	0.28
Gastroc. Mass (g/kg bw)	47	0.51	0.62	0.69	0.61	0.03	-0.18	0.28
Sm. Intest. Length (cm)	47	96.6	110.4	125.0	110.1	6.37	-0.23	0.12
N:NIH Unselected males								
Endurance Capacity (m)	50	273.3	634.3	1378	636.5	184.50		
Body Mass. (g)	50	227	306.5	361	299.4	29.88	-0.31	0.03
Visceral Fat (g/kg bw)	50	0.51	0.80	1.34	0.81	0.18	-0.40	0.00
Heart Mass (g/kg bw)	49	0.28	0.33	0.41	0.33	0.03	-0.11	0.43
Liver Mass (g/ kg bw)	50	4.14	5.31	6.17	5.18	0.55	-0.24	0.09
Stomach (g/kg bw)	50	0.35	0.40	0.50	0.41	0.04	0.31	0.03
Rt. Kidney Mass (g/kg bw)	48	0.00	0.49	0.54	0.47	0.08	0.12	0.42
Lft. Kidney Mass (g/kg bw))	50	0.42	0.48	0.85	0.49	0.07	-0.25	0.08
Sm. Intest. Mass (g/kg/ bw)	49	1.61	1.93	2.23	1.92	0.17	0.17	0.24
Gastroc. Mass (g/kg bw)	50	0.51	0.59	0.69	0.60	0.04	0.21	0.14
Sm. Intest. Length (cm)	49	100.6	117.6	155.4	119.0	8.86	-0.26	0.07