

Treadmill power test.v1

This procedure will measure anaerobic power in mice according to Marcaletti et al. Current Protocols in Mouse Biology, 2011.

Procedure

1. Prime the mice at 10:00 am on treadmill for 3 days (0% incline at 0.5 mph for 10 min).
2. Perform the power test at 10 am on the 4th day.
3. Set incline to 5% slope (5.0 on treadmill)!!!!!!!!!!
4. Start the running at 0.5 mph for 3 min.
5. Increase running speed by 0.1 mph every 3 min until exhaustion.
6. Record the time and calculation the running distance as following.

Time (min)	Incline (°)	mph	cm/s	Distance (m)	Total distance (m)
0	5	0.5	22.35		
3	5	0.6	26.82	40.23	40.23
6	5	0.7	31.29	48.28	88.51
9	5	0.8	35.76	56.33	144.84
12	5	0.9	40.23	64.37	209.21
15	5	1	44.70	72.42	281.63
18	5	1.1	49.17	80.47	362.10
21	5	1.2	53.64	88.51	450.62
24	5	1.3	58.12	96.56	547.18
27	5	1.4	62.59	104.61	651.78
30	5	1.5	67.06	112.65	764.44
33	5	1.6	71.53	120.70	885.14
36	5	1.7	76.00	128.75	1013.88
39	5	1.8	80.47	136.79	1150.68
42	5	1.9	84.94	144.84	1295.52
45	5	2	89.41	152.89	1448.41