



Fig. 1. The relationship between deep body temperature and subcutaneous body temperature in male zebra finches, measured simultaneously prior to experimental manipulation. We measured deep and subcutaneous body temperature simultaneously on each bird from a group in the morning before experimental manipulation in order to validate that the implants accurately reflected variation in deep body temperature. Deep body temperature was measured with a Testo 925 digital thermometer (Testo AG, Lenzkirch, Germany) with a standard Kapton® insulated type K (chromel--alumel) thermocouple (Ø 0.9 mm; ELFA AB, Järfälla, Sweden) inserted 12 mm through the cloaca (further insertion did not alter the temperature reading). Measurements of subcutaneous body temperature were obtained from the implanted PIT tags using a handheld racket antenna (Ø 17.5 cm; Destron Fearing) connected to an FS2001F ISO reader (Destron Fearing). The calibration revealed a strong positive linear relationship between deep body temperature and subcutaneous body temperature.

Table S1. Test statistics, degrees of freedom and resultant P-values for final models. Models in which variation in the dependent variable could not be predicted from any of the explanatory variables are not presented. The table also includes dose-specific model outputs of the body temperature response to a lipopolysaccharide (LPS) challenge during the day, and treatment-specific model outputs of the body temperature response to a LPS-challenge during the night.

Model / Parameter	F	d.f.	P
<u>Responses to a LPS-challenge during the day:</u>			
Body temperature response:			
LPS-dose	1.64	4, 45	0.18
Time	0.19	1, 1789	0.66
Time ²	17.13	1, 1789	< 0.001
LPS-dose × Time	3.15	4, 1789	0.014
LPS-dose × Time ²	3.70	4, 1789	0.0053
Control:			
Time	0.072	1, 357	0.79
Time ²	3.90	1, 357	0.049
1 µg LPS kg ⁻¹ :			
Time	54.86	1, 359	< 0.001
10 µg LPS kg ⁻¹ :			
Time	3.44	1, 358	0.065
Time ²	17.13	1, 358	< 0.001
100 µg LPS kg ⁻¹ :			
Time	0.065	1, 358	0.80
Time ²	8.34	1, 358	0.0041
1000 µg LPS kg ⁻¹ :			
Time	55.00	1, 359	< 0.001
Temperature regression – maximum:			
LPS-dose	4.53	1, 48	0.039
Seed consumption day 1:			
LPS-dose	19.81	1, 45	< 0.001
Group	3.41	3, 45	0.025
Seed consumption day 2:			
LPS-dose	3.21	1, 46	0.080
LPS-dose ²	9.50	1, 46	0.0035
Body mass gain day 1:			
LPS-dose	4.26	1, 45	0.045
Initial body mass	7.08	1, 45	0.011
Body mass loss night:			
Group	11.50	3, 43	< 0.001
Body mass gain day 2:			
LPS-dose	4.33	1, 45	0.043
LPS-dose ²	6.75	1, 45	0.013
<u>Responses to a LPS-challenge during the night:</u>			
Body temperature response:			
Treatment	4.49	1, 22	0.046
Time	477.10	1, 692	< 0.001
Time ²	327.76	1, 692	< 0.001
Treatment × Time	37.80	1, 692	< 0.001
Treatment × Time ²	44.86	1, 692	< 0.001
Control:			
Time	534.71	1, 346	< 0.001
Time ²	419.80	1, 346	< 0.001
100 µg LPS kg ⁻¹ :			
Time	97.54	1, 347.9	< 0.001
Time ²	51.56	1, 348.6	< 0.001