



**Figure S2.** The maximum resting metabolic rate was measured before leg loss, 1 minute after, 1 hour after and 24 hours after leg loss in a subset of males. The graph displays the metabolic rate and how this decreased after 24 hours. Resting Metabolic rate (y-axis) is body-mass corrected (i.e. least-square means of the linear regression of body mass with metabolic rate). Comparisons between pre-leg removal RMR and 24hr RMR reveal significant drop in RMR in males (GLM: Walds  $\chi^2 = 3.14$ , df =3,39, p = 0.035; error bars display standard errors).

## Methods S2

To examine a possible short-term stress response of leg loss, we measured the maximum metabolic rate over discrete time periods. For a subset of males, we used flow-through respirometry to measure the resting metabolic rate before leg loss, immediately after leg loss, 1 hr after leg loss and finally 24 hours after leg loss. We constructed a GLM with  $\log_{10}$  resting metabolic as the response variable and treatment (before leg loss, 1 min , 1 hr and 24 hours after leg loss) as explanatory variables. We found a significant effect of treatment on  $\log_{10}$  metabolic rate only 24 hours after leg loss (Figure 3 & S2; Walds  $\chi^2 = 3.14$ , df = 3,38 p = 0.035).