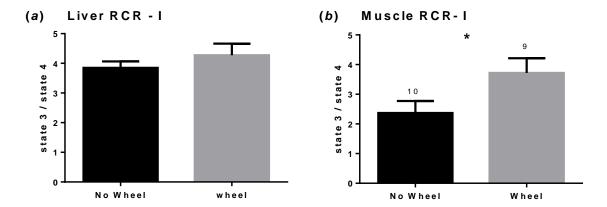
**Table S1.** Markers of oxidative damage (4-HNE and protein carbonyls) and antioxidants (CuZnSOD, MnSOD, catalase, GPX-1) in liver, skeletal muscle, heart, and brain. Data were obtained by western blotting and are presented as mean  $\pm$  standard error. The units for all variables are fold change relative to the no wheel group. n = 10 for each group. No significant differences were detected between groups (P > 0.05).

	4-HNE	Prot. carb	Catalase	GPX-1	CuZnSOD	MnSOD
Liver:						
no wheel	$1.00 \pm 0.05$	$1.00 \pm 0.11$	$1.00 \pm 0.12$	$1.00 \pm 0.10$	$1.00 \pm 0.19$	$1.00 \pm 0.06$
wheel	$1.03 \pm 0.08$	$0.91 \pm 0.08$	$1.21 \pm 0.18$	$0.94 \pm 0.10$	$0.79 \pm 0.17$	$0.99 \pm 0.11$
Skeletal muscle:						
no wheel	$1.00 \pm 0.08$	$1.00 \pm 0.07$	$1.00 \pm 0.20$	$1.00 \pm 0.19$	$1.00 \pm 0.18$	$1.00 \pm 0.18$
wheel	$1.03 \pm 0.07$	$1.03 \pm 0.06$	$1.03 \pm 0.16$	$1.10\pm0.21$	$1.12 \pm 0.20$	$1.12 \pm 0.20$
Heart:						
no wheel	$1.00 \pm 0.17$	$1.00 \pm 0.24$	$1.00 \pm 0.17$	$1.00 \pm 0.57$	$1.00 \pm 0.23$	$1.00 \pm 0.13$
wheel	$0.96 \pm 0.19$	$1.04 \pm 0.08$	$0.74 \pm 0.11$	$0.894 \pm 0.11$	$1.06 \pm 0.22$	$1.03\pm0.12$
Brain:						
no wheel	$1.00 \pm 0.13$	$1.00 \pm 0.10$	$1.00 \pm 0.19$	$1.00 \pm 0.27$	$1.00 \pm 0.12$	$1.00 \pm 0.20$
wheel	$1.00 \pm 0.12$	$1.11 \pm 0.13$	$0.95 \pm 0.16$	$1.03 \pm 0.27$	$1.19 \pm 0.14$	$0.79 \pm 0.21$

Figure 1



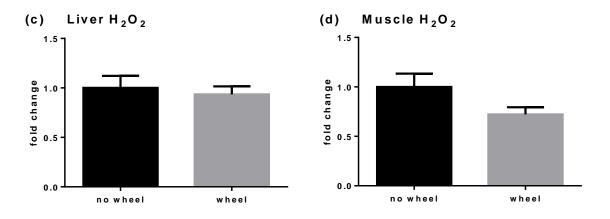
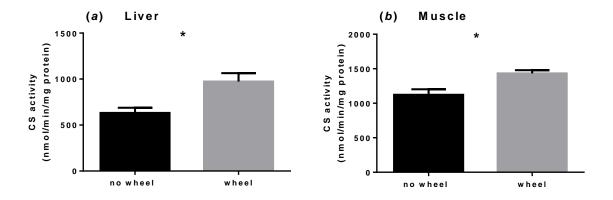


Fig. S1. Respiratory control ratio (RCR) and hydrogen peroxide ( $H_2O_2$ ) emission by isolated mitochondria. Data from mitochondria isolated from (a and c) liver and (b and d) skeletal muscle. Data are presented as mean  $\pm$  standard error. n=10 for each group unless labeled above bars. \* indicates P < 0.05

Figure 2



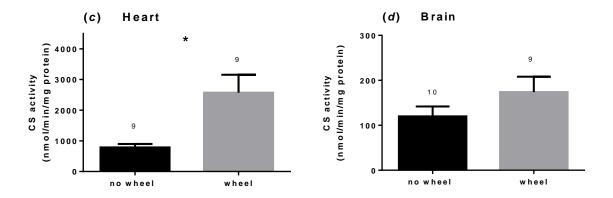


Fig. S2. Activity of citrate synthase in the (a) liver, (b) skeletal muscle, (c) heart, and (d) brain of mice. Data are presented as mean  $\pm$  standard error. n = 10 unless labeled above bars. \* indicates P < 0.05