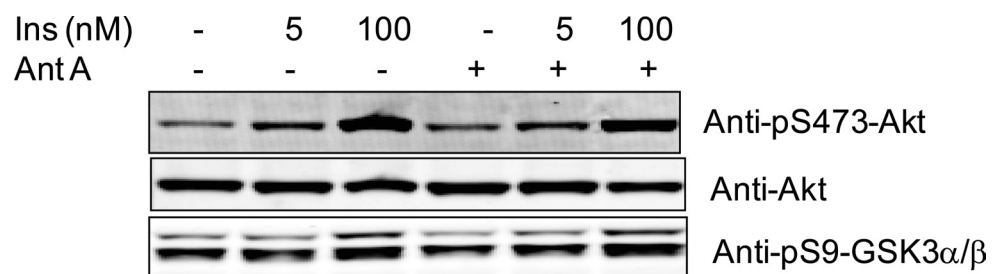
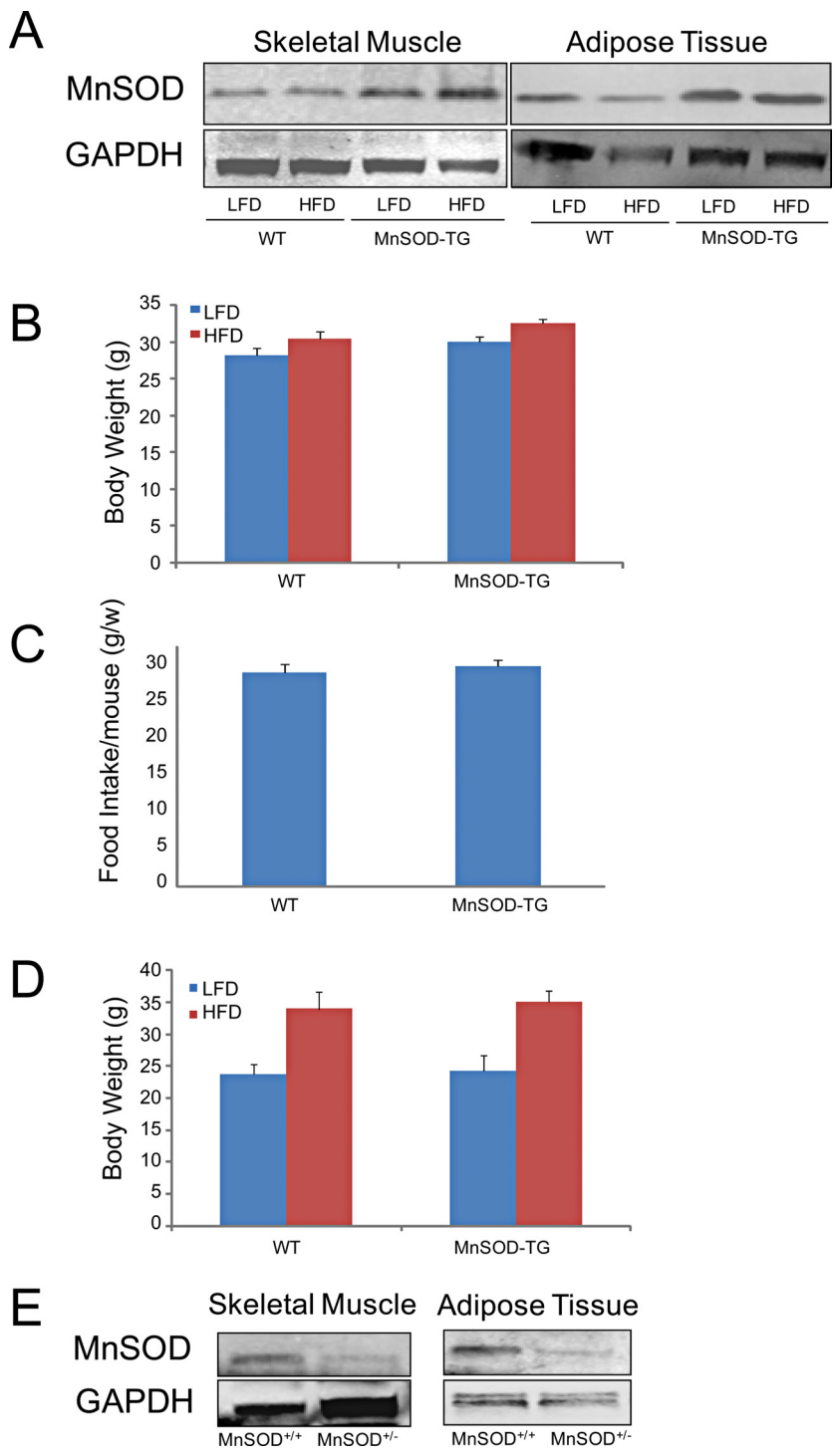


# Supporting Information

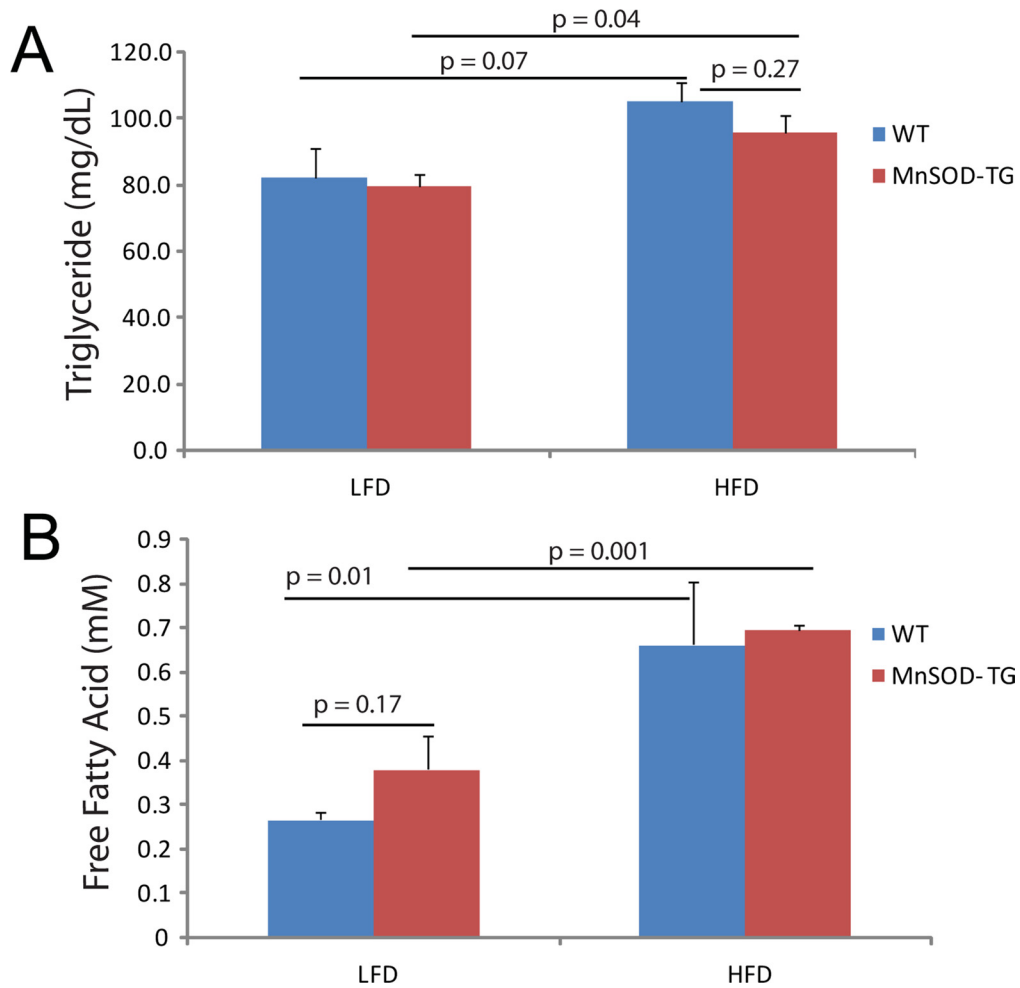
Hoehn et al. 10.1073/pnas.0902380106



**Fig. S1.** Superoxide production does not alter maximal or submaximal insulin-stimulated Akt phosphorylation or Akt activity toward its downstream substrate GSK3. L6 myoblasts were treated with 50 nM antimycin for 10 min before insulin stimulation as described in Fig. 3F. Representative Western blots of three experiments are shown.



**Fig. S2.** Supplementary data comparisons between wild-type (WT) and transgenic mice used in this study. (A) Mitochondrial superoxide dismutase (MnSOD) expression in skeletal muscle and adipose tissue of WT and MnSOD transgenic mice on a low fat diet (LFD) or high fat diet (HFD). (B) Body weight of WT and MnSOD transgenic (MnSOD-TG) mice before and one week after HFD. (C) Food intake during the week of high fat feeding in (B). (D) Body weights of mice used in the long-term (12-week), high-fat feeding experiment. (E) MnSOD expression in skeletal muscle and adipose tissue of WT and MnSOD<sup>+/-</sup> mice used in this study.



**Fig. S3.** Blood lipid comparisons between male WT and MnSOD-TG mice used in this study. (A) Plasma triglyceride levels were  $82.3 \pm 9.0$  and  $79.8 \pm 3.3$  mg/dL, respectively, for WT and MnSOD-TG fed chow diet and  $105.3 \pm 5.7$  and  $95.8 \pm 5.3$  mM, respectively, for WT and MnSOD-TG fed HFD for 16 weeks. (B) Plasma free fatty acid levels were  $0.27 \pm 0.02$  and  $0.38 \pm 0.07$  mM, respectively, for WT and MnSOD-TG fed chow diet and  $0.66 \pm 0.14$  and  $0.70 \pm 0.01$  mM, respectively, for WT and MnSOD-TG fed HFD for 16 weeks.  $n = 4-5$  per group.