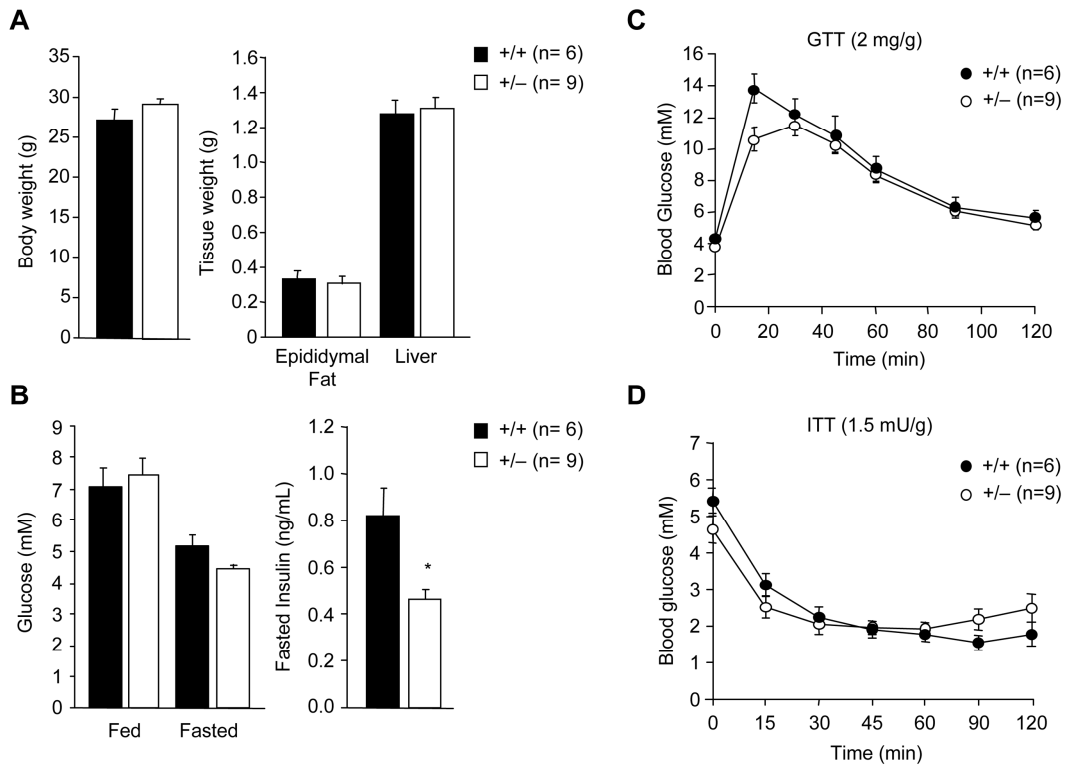
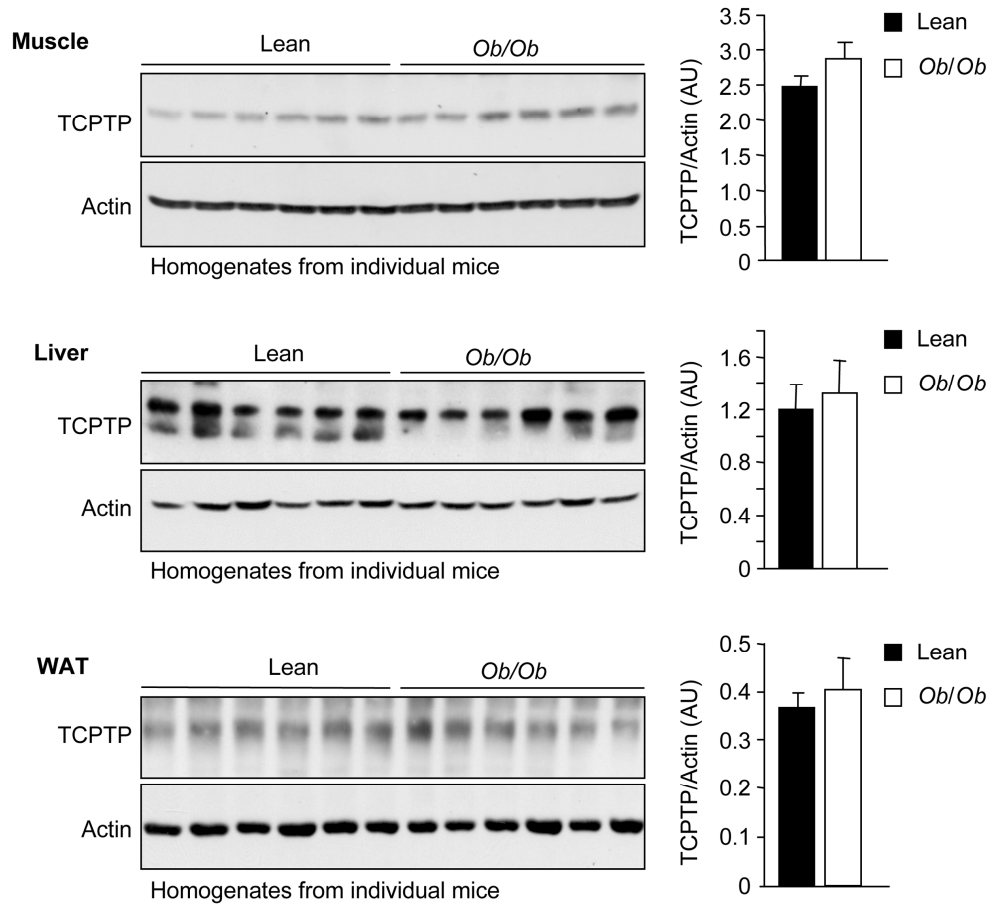


## SUPPLEMENTAL DATA

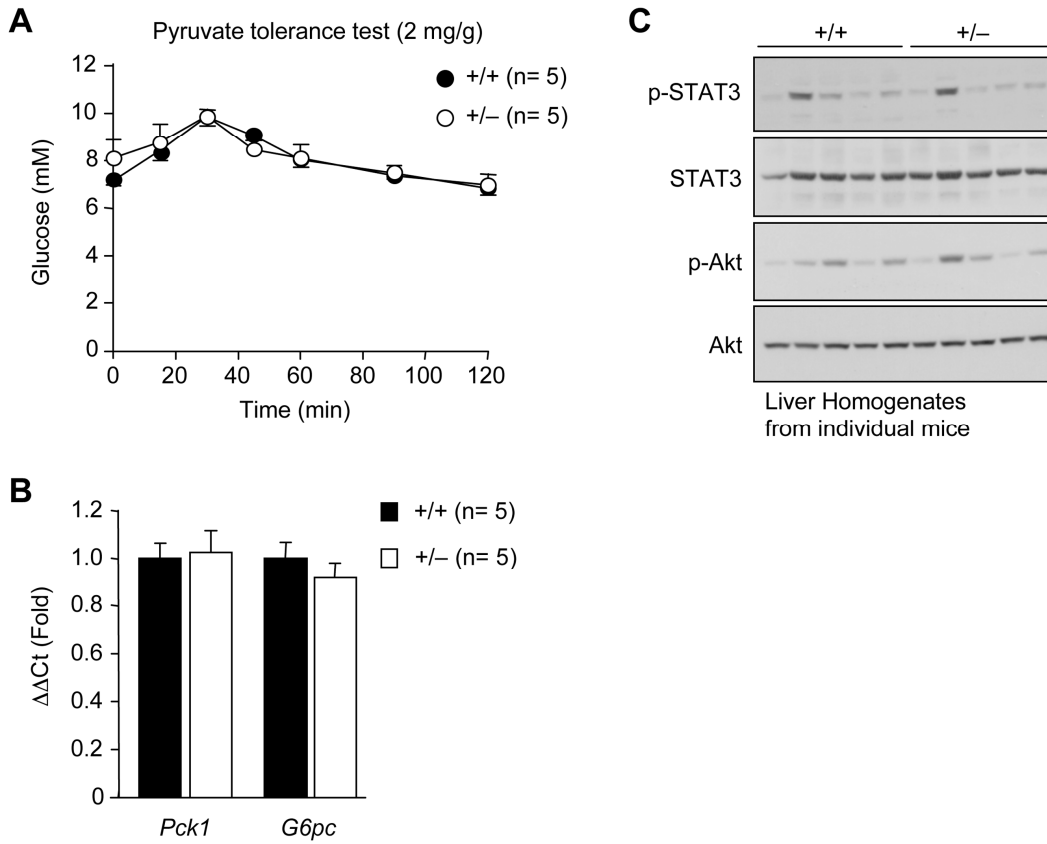
**Figure S1. Glucose homeostasis in chow fed *Ptpn2*<sup>+/-</sup> mice.** 8-10 week old *Ptpn2*<sup>+/-</sup> and +/+ littermate male mice were fed a standard chow diet for 20 weeks and (a) body weights and the indicated tissue weights determined. (b) Fed and fasted (6 h) blood glucose and fasted plasma insulin levels were measured. Mice were fasted for (c) 6 h and glucose tolerance tests (GTTs) performed, or (d) 4 h and insulin tolerance tests (ITTs) performed. Results shown are means  $\pm$  SE; \*  $p < 0.05$  by a two-tailed student's t-test.



**Figure S2. TCPTP protein levels are not altered in obese mice.** Liver, gastrocnemius muscle, or epididymal white adipose tissue (WAT) was extracted from 6 month old chow fed lean (C57BL/6) mice or *Ob/Ob* (C57BL/6) obese mice and processed for immunoblot analysis. Representative blots and quantified results (arbitrary units: AU) are shown (means  $\pm$  SE).



**Figure S3. Gluconeogenesis is not altered in chow fed *Ptpn2*<sup>+/-</sup> mice.** Chow fed *Ptpn2*<sup>+/-</sup> and *+/+* male mice were processed for (a) pyruvate tolerance tests, or fasted for 4 h and livers extracted and processed for (b) quantitative ( $\Delta\Delta Ct$ ) real time PCR to measure the expression of gluconeogenic genes *Pck1* and *G6pc*, or (c) immunoblot analysis to assess basal PI3K/Akt signaling (Akt Ser-473 phosphorylation) and STAT3 Y705 phosphorylation.



**Figure S4. Unaltered insulin-induced IR phosphorylation, IRS-1/2 phosphorylation and PI3K/Akt signaling in *Ptpn2*<sup>+/-</sup> mice.** 8-10 week old *Ptpn2*<sup>+/-</sup> and <sup>+/+</sup> male mice were fed a high fat diet for 15 weeks. Fasted (4 h) mice were injected with saline or insulin (2 mU/g, intraperitoneal) for 10 min and tissues extracted. **(a)** Livers were homogenised, clarified lysates resolved by SDS-PAGE and insulin signaling in individual mice assessed by immunoblot analysis and quantified by densitometry. **(b)** Livers were homogenised, clarified by centrifugation and IRS-1 (06-248; Upstate, Billerica, MA) or IRS-2 (06-506; Upstate; 4 mg antibody in each case) immunoprecipitated (1 mg of protein, 3 h contact time). IRS-1/2 immunoprecipitates were resolved by SDS-PAGE and immunoblotted for phosphotyrosine (pTyr; 4G10, Upstate) and IRS-1 or -2 as indicated. Representative blots and quantified results (arbitrary units: AU) are shown (means  $\pm$  SE). **(c)** Epididymal WAT, or *gastrocnemius* muscle was extracted, homogenised and clarified lysates processed for immunoblot analysis as indicated.

