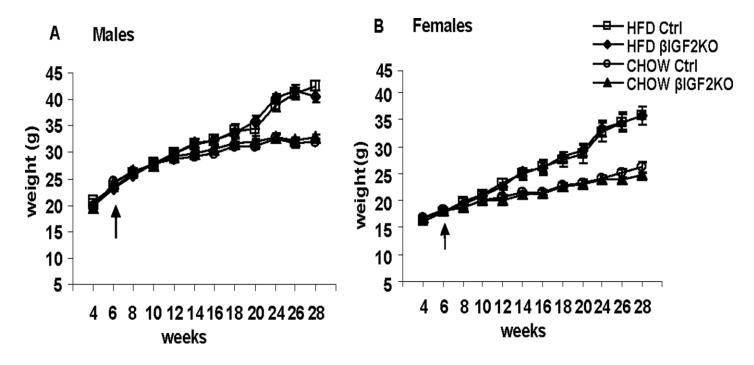
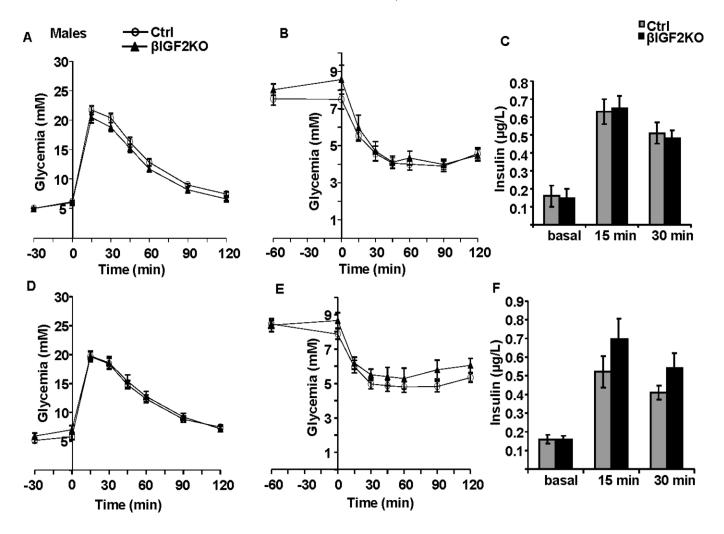
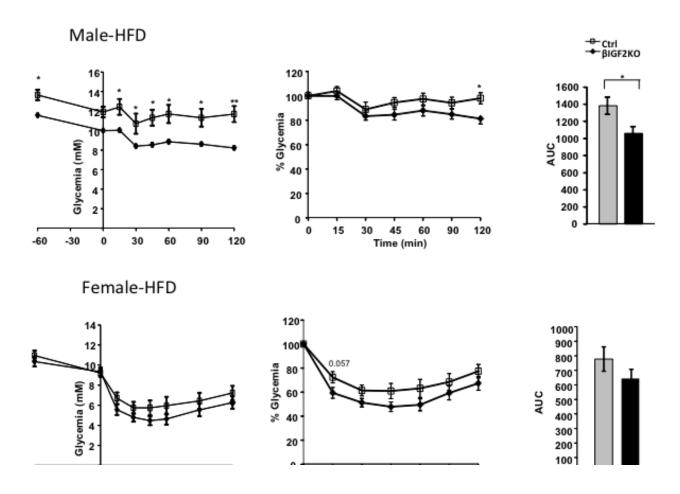
**Supplementary Figure S1**. No alteration in body weight gain in  $\beta$ IGF2KO male and female mice were fed a NC or a HFD. Cohorts of male (A) and female (B) Ctrl and  $\beta$ IGF2KO mice fed a NC or a HFD from 6 weeks of age and body weight were determined at the indicated times. Data are means  $\pm$  SEM, n = 9–14.



**Supplementary Figure S2.** No impairment in glucose homeostasis in young and old  $\beta$ IGF2KO male mice. (*A*) Glucose tolerance, (*B*) insulin tolerance and (*C*) glucose-stimulated plasma insulin levels in 6-8 week-old male Ctrl and  $\beta$ IGF2KO mice measured at the indicated times after an i.p. glucose bolus. (*D*) Glucose tolerance, (*E*) insulin tolerance and (*F*) glucose-stimulated plasma insulin levels in 24-26 week-old male Ctrl and  $\beta$ IGF2KO mice. Data are means  $\pm$  SEM, n = 9-14.



**Supplementary Figure S3.** Insulin tolerance tests performed on high fat diet fed male (top row) and female (bottom row) Control and βIGF2KO mice. Five hour fasted mice were injected i.p. with 0.3 U/kg of insulin at time 0 and their blood glucose levels were measured at the indicated times. Left graphs: glycemic levels (mM); central graphs: glycemia expressed as percent of basal value; right graphs: area under the glycemic curves. \*p<0.05, \*\*p<0.01.



**Supplementary Figure S4.** Normal glucose homeostasis in pregnant  $\beta$ IGF2KO mice. (*A*) Fed glycemia and (*B*) insulinemia of 14 day pregnant (P14) Ctrl and  $\beta$ IGF2KO mice. (*C*) Glucose tolerance test in virgin (PO) and 14 day pregnant (P14) Ctrl and  $\beta$ IGF2KO mice. Data are mean  $\pm$  SEM n=5-8.

