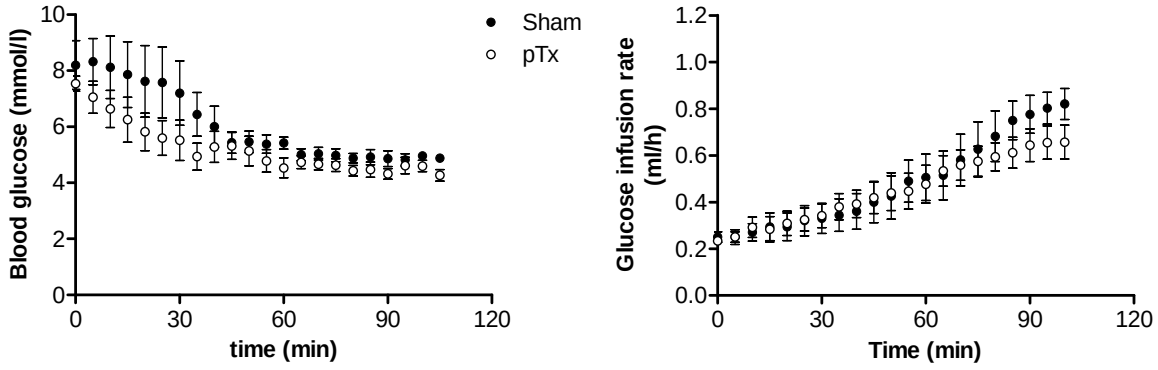
Supplementary Table S1. *Metabolic Characteristics of mice receiving a portal fat transplant from IL6KO mice*

	Sham	*pTx*
Before transplantation		
Body weight (g)	28.8 ± 1.8	27.0 ± 0.9
Fat pad weight (mg):		
- Transplant		255 ± 29
At sacrifice		
Body weight (g)	30.3 ± 1.4	27.1 ± 0.4
Fat pad weight (mg):		
- Transplant		149 ± 26
- Epididymidal	292 ± 64	408 ± 84
- Mesenteric	141 ± 23	130 ± 17
- Retroperitoneal	91 ± 16	93 ± 20
- Inguinal	171 ± 51	221 ± 66
Glucose (mM)	3.5 ± 0.3	3.8 ± 0.3
FFA (mM)	0.89 ± 0.25	0.88 ± 0.15

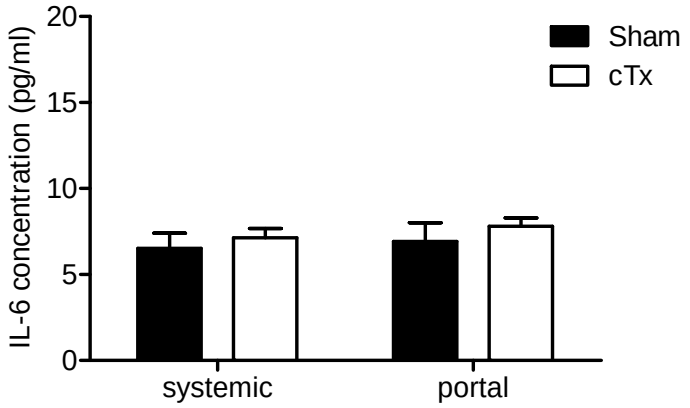
Results are the means ± SEM of three animals. Blood samples were taken after overnight fasting.

Supplementary Figure S1. Blood glucose concentrations and glucose infusion rate during hyperinsulinemic-euglycemic clamp



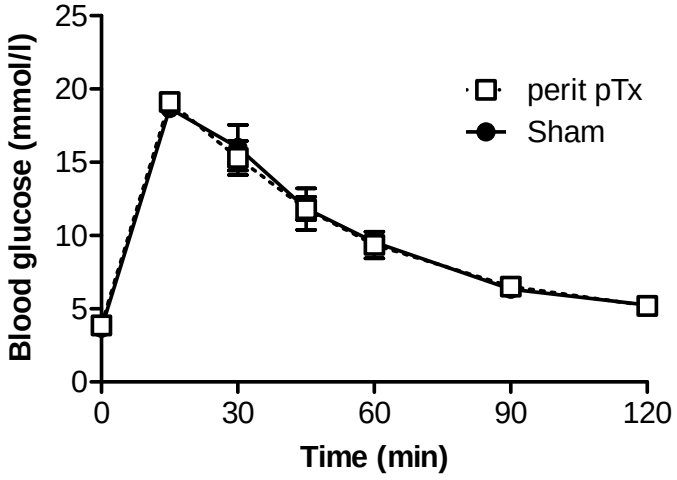
Blood glucose levels were clamped upon insulin infusion at about 5 mmol/l in mice receiving portal drained fat pads (○) and in sham-operated mice (●) (left graph). In order to maintain euglycemia, glucose infusion rate was adjusted over time (right graph).

Supplementary Figure S2. Similar IL-6 plasma concentrations in sham operated and caval transplanted mice



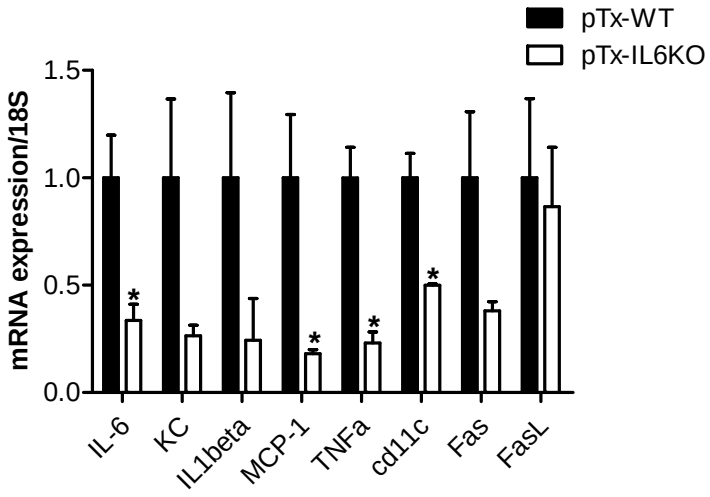
IL-6 was measured in systemic and portal plasma samples of mice receiving a caval drained fat transplant (cTx) and in sham operated mice. Results are the mean ± SEM of 5-10 animals.

Supplementary Figure S3. Intraperitoneal glucose tolerance test in mice receiving a portal drained peritoneal tissue transplant



Intraperitoneal glucose tolerance test (2 g glucose/kg body weight) was performed four weeks after surgical procedure in mice receiving portal drained peritoneal tissue transplants including no fat tissue (perit pTx; □) or in sham-operated mice (●) after a overnight fast. Results are expressed as mean blood glucose concentration ± SEM of 4-5 animals.

Supplementary Figure S4. Decreased expression of inflammatory markers in fat transplants from IL-6 knockout mice



Five weeks after transplantation portal transplanted fat pads of mice receiving the transplant from wildtype (pTx-WT) or IL-6 knockout mice (pTx-IL6KO) were harvested and rtPCR was performed. Results are the mean ± SEM of 3-4 animals. *$p < 0.05$ (Student's *t* test)