SUPPLEMENTARY DATA

Supplementary Table 1. Liver ATP levels phosphorylated AMPK levels (as previously described (29,26)), GFAT mRNA levels (Mm00600127_m1), FASN mRNA levels (Mm00662319_m1), SCD1 mRNA levels (Mm01197142_m1), SREBF1 levels (Mm00550338_m1) (with 18s rNA as control) and plasma adiponectin concentration (Millipore RIA) in transgenic mice and negative littermates, approximately 16 weeks of age (n = 4-5 for each group).

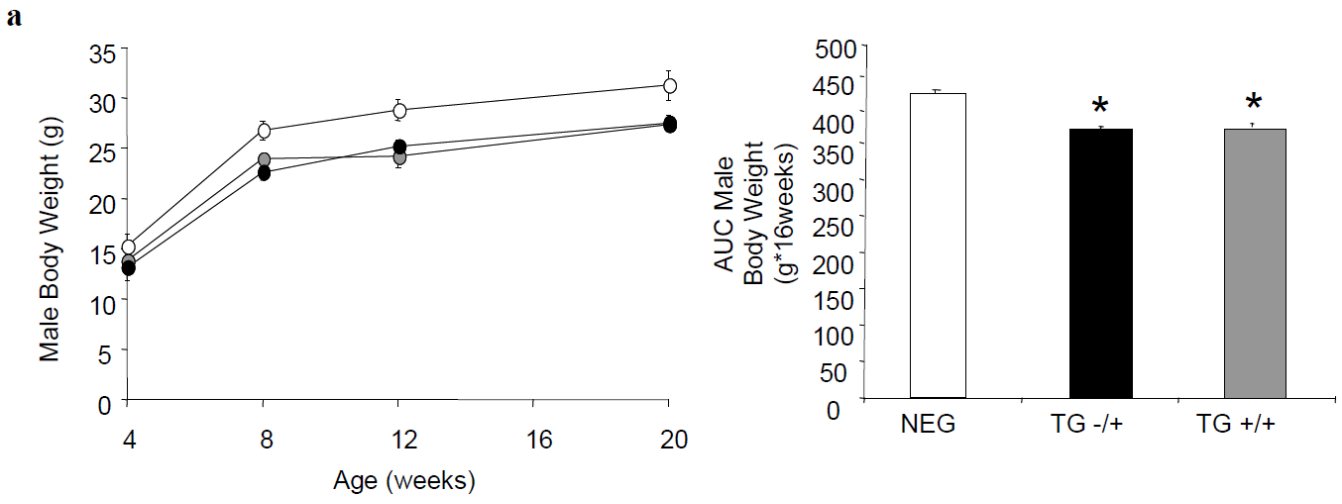
	NEG	TG
ATP (µg/mg protein)	3.8 ± 1.1	4.9 ± 0.8
pAMPK (Fold of NEG)	1.0 ± 0.3	0.8 ± 0.2
GFAT mRNA (Fold of NEG)	1.00 ± 0.13	1.40 ± 0.15
FASN mRNA (Fold of NEG)	1.00 ± 0.34	0.93 ± 0.23
SCD1 mRNA (Fold NEG)	1.00 ± 0.22	1.08 ± 0.39
SREBF1 mRNA (Fold NEG)	1.00 ± 0.21	0.94 ± 0.07
Plasma Adiponectin (µg/mL)	16.9 ± 1.7	15.6 ± 1.8

SUPPLEMENTARY DATA

Supplementary Table 2. Hepatic fructose-1,6-bisphosphate and fructose-6-phosphate. Liver homogenates were used to measure fructose-1,6-bisphosphate and fructose-6-phosphate as previously described (29). Fasted levels of gluconeogenic intermediates from transgenic and negative littermates, ~24 weeks of age (n = 3-4 for each group, *p<0.05 vs. NEG).

	NEG	TG
Fructose-1,6-bisphosphate (mmol/min/µg protein)	0.11 ± 0.01	*0.43 ± 0.07
Fructose-6-phosphate (mmol/min/µg protein)	0.99 ± 0.46	*3.84 ± 0.90

Supplementary Figure 1. Characterisation of hepatic male FBPase transgenic mice.
Body weights of negative (-○-), hemizygous transgenic (-●-) and homozygous transgenic (-◍-) male mice from homozygous breeding (a) (n=7-10, AUC *p<0.05 vs. NEG).



SUPPLEMENTARY DATA

Supplementary Figure 2. Characterisation of transgenic mice over-expressing FBPase in the liver and hypothalamus. Body weights of male negative (-○-) and transgenic (-●-) mice from hemizygous breeding from 4 weeks of age to 22 weeks old (a) (n=10, AUC *p<0.05 vs. NEG). Body weights of female negative (-○-) and transgenic (-●-) mice from hemizygous breeding (b) (n=10, AUC *p<0.05 vs. NEG). Fat pad mass of both female and male hemizygous transgenic mice (black bars) compared with their negative littermates at 24 weeks of age (white bars) (c) (n=10 for NEG, *p<0.05). Average daily food intake of both female and male hemizygous transgenic mice (black bars) compared with negative littermates (white bars) (d) (n=10, *p<0.05 vs. NEG). Physical activity measurements at 23 weeks of age of female and male negative (white bars) and hemizygous transgenic mice (black bars) (e) (n=10).