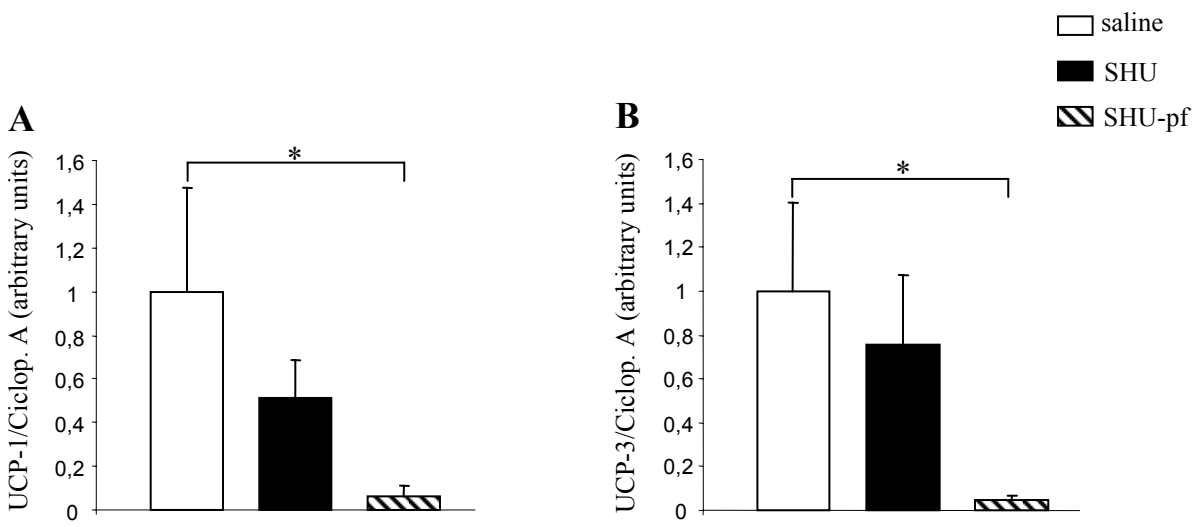
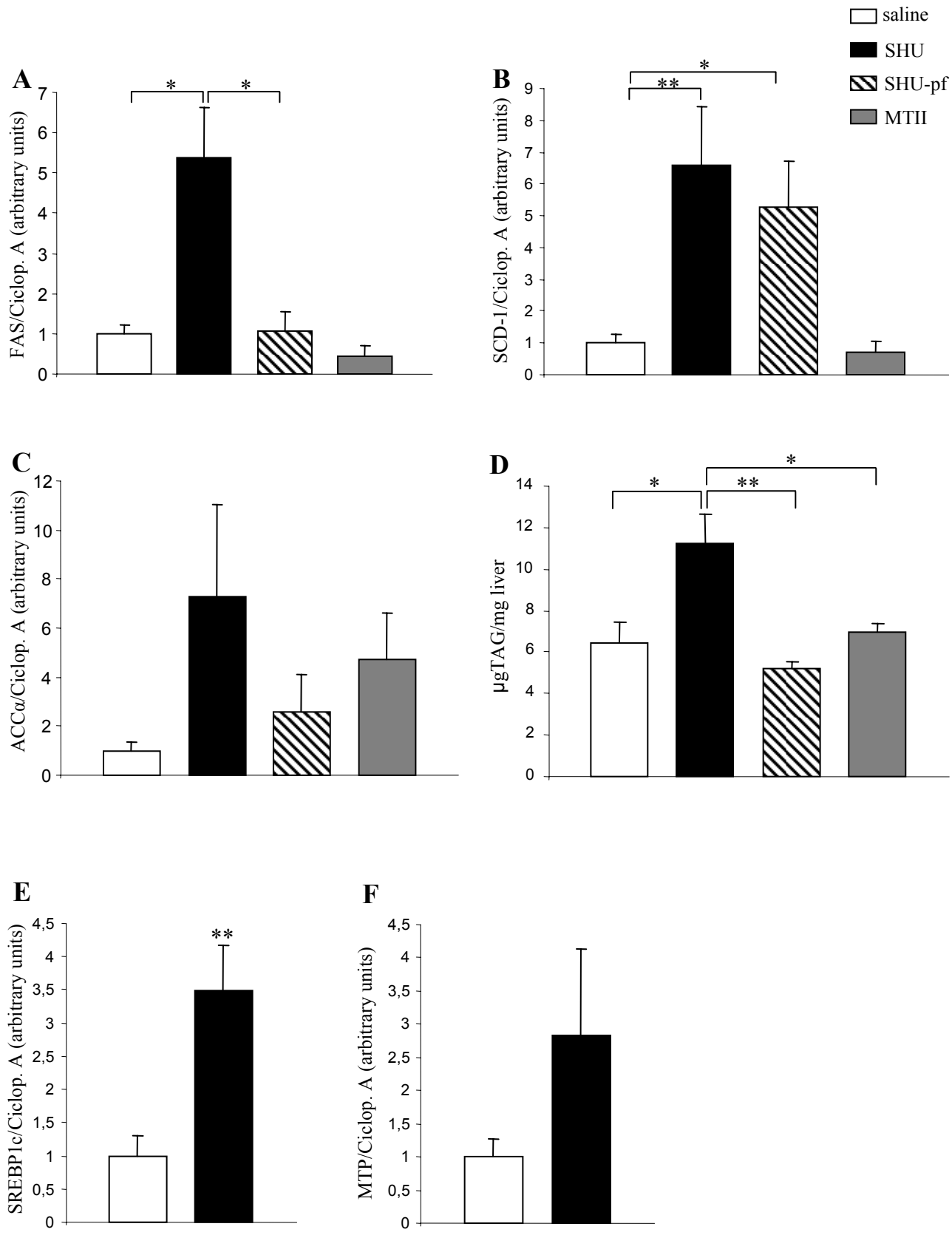
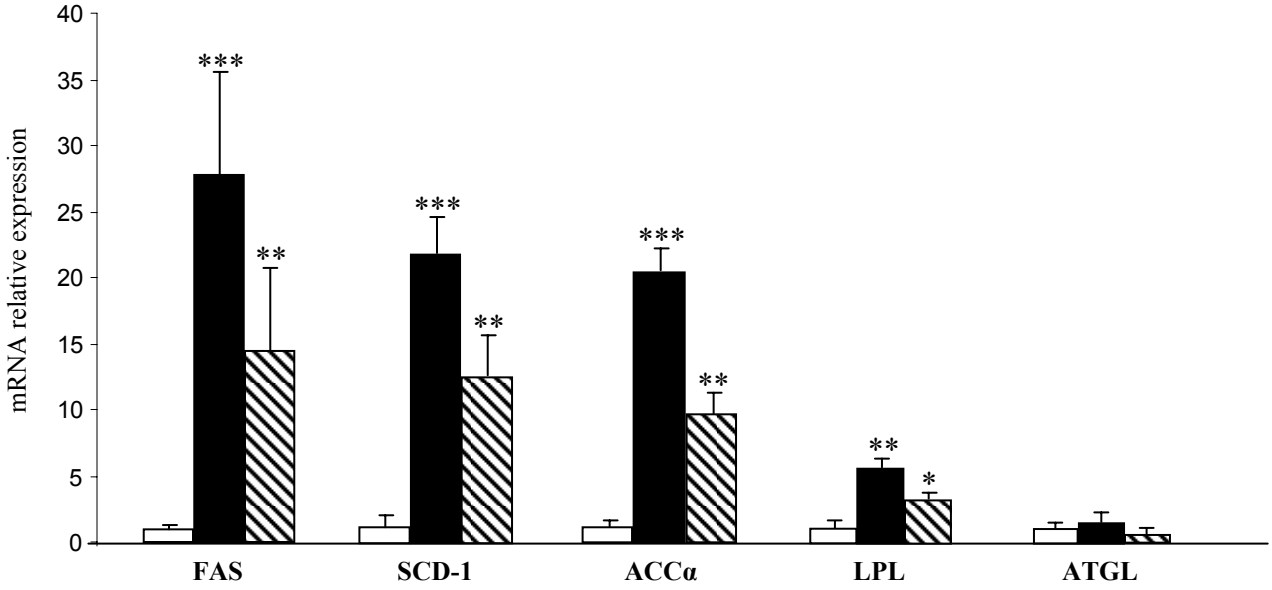
Supplemental Figure 1



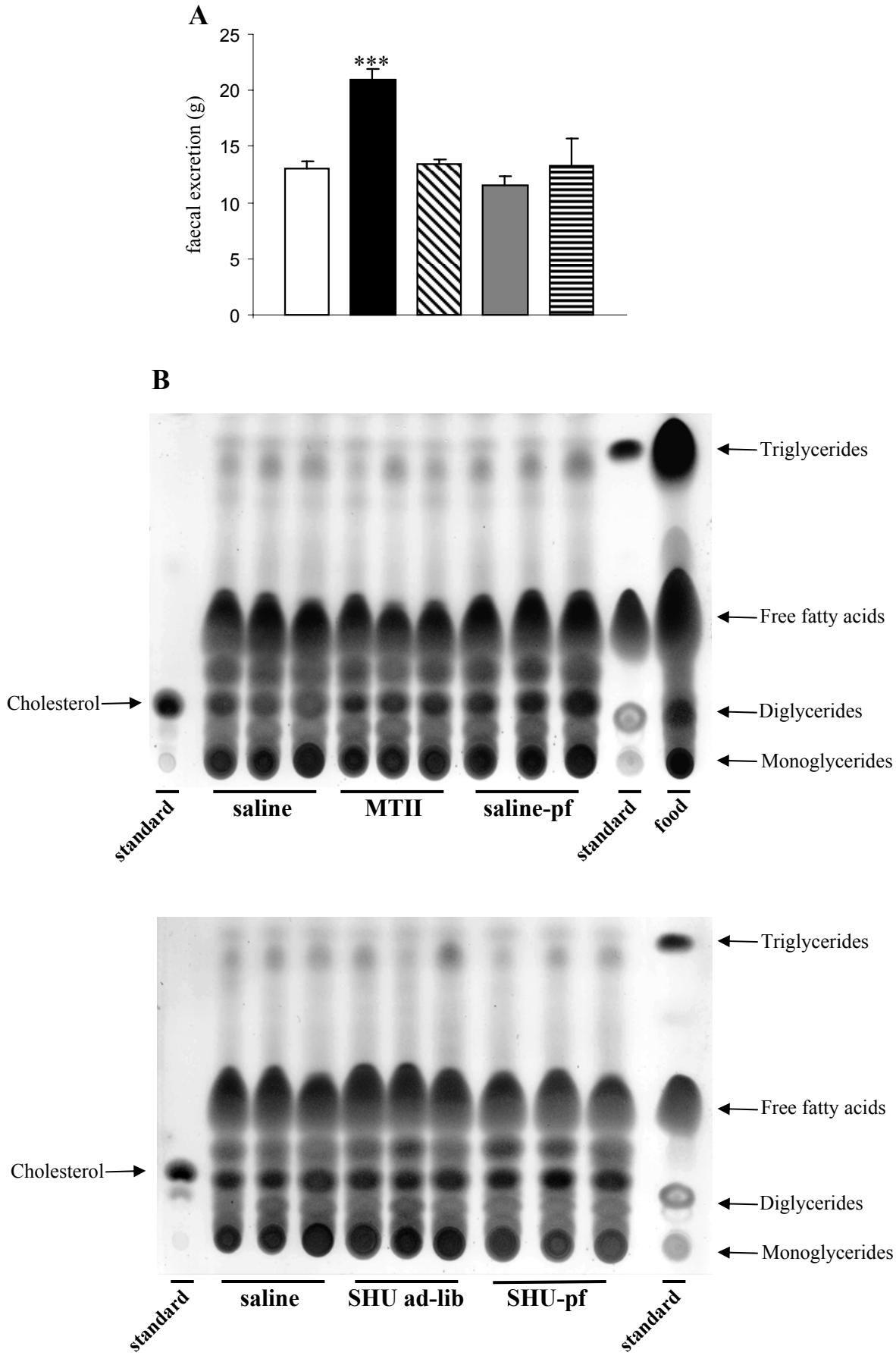
Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4



Supplemental Figure 1. Effect of a 7-day icv SHU9119 (24 nmol/d) infusion on BAT mRNA abundance of UCP-1 (A), and UCP-3 (B). Data are presented as values normalized to cyclophilin A, which was used as a housekeeping gene. Values are mean ± SEM of 6–8 animals per group. *P < 0.05 versus controls.

Supplemental Figure 2. Effect of a 7-day icv SHU9119 (24 nmol/d) and MTII (1 nmol/d) infusion on liver mRNA expression of FAS (A), SCD-1 (B), ACC_ (C), TAG content (D), SREBP1c (E) and MTTP (F). Data are presented as values normalized to cyclophilin A which was used as a housekeeping gene. Values are mean ± SEM of 6–8 animals per group. *P < 0.05; **P < 0.01 versus saline

Supplemental Figure 3. Effect of a 7-day icv SHU9119 (24 nmol/d) on eWAT mRNA expression of FAS, SCD-1, ACC_, LPL and ATGL in insulin-clamped rats. Data are presented as values normalized to RPS-29 which was used as a housekeeping gene. Values are mean ± SEM of 5–6 animals per group. *P < 0.05; **P < 0.01; ***P < 0.001 versus saline.

Supplemental Figure 4. Effect of a 7-day icv SHU9119 (24 nmol/d) and MTII (1 nmol/d) infusion on faecal excretion (A) and lipid content in faeces (B). Values are mean ± SEM of 6–8 animals per group. *P < 0.05; **P < 0.01 versus saline

Supplemental Table 1

Theoretical estimates of fat utilization as a percentage of total energy consumption were made according to the following steps. Complete oxidation of carbohydrates yields RQ = 1. Complete oxidation of triglycerides with long chain fatty acids yields RQ ~ 0.67. Assuming that the animals primarily derived their energy from carbohydrates and triglycerides under our experimental conditions, we can calculate the average percentage of fat as the fuel source with vehicle treatment (X%), SHU9119-ad lib treatment (Y%), SHU9119-pf (Z%) and MTII (T%) by solving the following equations:

Vehicle treatment:	$1 \times (100\% - X\%) + 0.67 \times (X\%) = 0.728 \rightarrow X\% = 82.4\%$
SHU9119-ad lib treatment:	$1 \times (100\% - Y\%) + 0.67 \times (Y\%) = 0.824 \rightarrow Y\% = 53.3\%$
SHU9119-pf:	$1 \times (100\% - Z\%) + 0.67 \times (Z\%) = 0.814 \rightarrow Z\% = 56.3\%$
MTII:	$1 \times (100\% - T\%) + 0.67 \times (T\%) = 0.711 \rightarrow T\% = 87.5\%$