

*Supplementary Figure 1. Metabolic outcomes of ip tLCA infusion*

Mice received intraperitoneal (ip) infusion of tauroolithocholic acid (tLCA, pink) or vehicle (control, black) for 8 days. Calorimetric outcomes of the last 4 days (white: lights on, grey: lights off). A: respiratory exchange ratio (RER), B: energy expenditure (EE), C: physical activity, D: fat oxidation, E: carbohydrate oxidation. At the end of the treatment there was no difference between the groups in total body weight (F), lean mass (G) or fat mass (H). Neither did the groups differ in plasma total bile acid concentration (I) or bile acid profile (J). The dotted line indicates the lower limit of detection: 0.05 mM.

*Supplementary Figure 2. Icv tLCA treatment does not affect adiposity nor energy expenditure in mice fed a HFD*

High fat diet (HFD)-fed mice received intracerebroventricular (icv) infusion of tauroolithocholic acid (tLCA, red) or vehicle (control, white) for 23 days. At the end of treatment the mice were killed for analysis of white adipose tissue (WAT) depots. A: There were no differences in total body weight between icv tLCA-treated mice and their controls. B: Weight of gonadal WAT (gWAT) pads did not differ between the groups. C: Calorimetric outcomes of the metabolic cages of the last 4 days were not significantly different between groups (white: lights on, grey: lights off).