Figure S1. FXR does not contribute to increased lipogenesis in the liver. qPCR analysis of A) Fas, B) Acc1, C) Ppara, D) Acox1 and E) Cptα1 expression in livers from mice after 10 weeks on a HFD (n=4-9 mice per group). Mean values ± SEM are plotted; *p<0.05, **p<0.01, ***p<0.001 versus GF of same genotype; #significant for genotype-colonisation interaction.
**Figure S2.** Bile acid profiles in serum from **A)** the vena cava (n=5-9 mice per group) and **B)** the caecum (n=4-9 mice per group) after 10 weeks on HFD. Mean values are plotted and p values determined by t test between CONV-R wild-type and Fxr/- are listed. The following bile acids were analysed: TCA, taurocholic acid; TUDCA, taouroursodeoxycholic; TDCA, taurodeoxycholic acid; THDCA, taurohyodeoxycholic acid; DCA, deoxycholic acid; CA, cholic acid; TCDCA tauroconjugated chenodeoxycholic acid; T-ωMCA, tauroconjugated omega murocholic acid; T-αMCA, tauroconjugated alpha murocholic acid; T-βMCA, tauroconjugated beta murocholic acid; ωMCA, omega murocholic acid; αMCA, alpha murocholic acid; βMCA, beta murocholic acid; TLCA, taurolitocholic acid; UDCA, ursodeoxycholic acid and HDCA, hyodeoxycholic acid. Not all bile acids were detected and those undetected or at low levels (>1%) are combined as other.
**Figure S3.** qRT-PCR analysis of A) *Cyp7a1* and B) *Cyp8b1* expression in livers from GF and CONV-R wild-type and *Fxr-/-* mice after 10 weeks on HFD (n=4-9 mice per group). Mean values ± SEM are plotted; *p<0.05, **p<0.01, ***p<0.001 versus GF of same genotype; #significant for genotype-colonisation interaction.