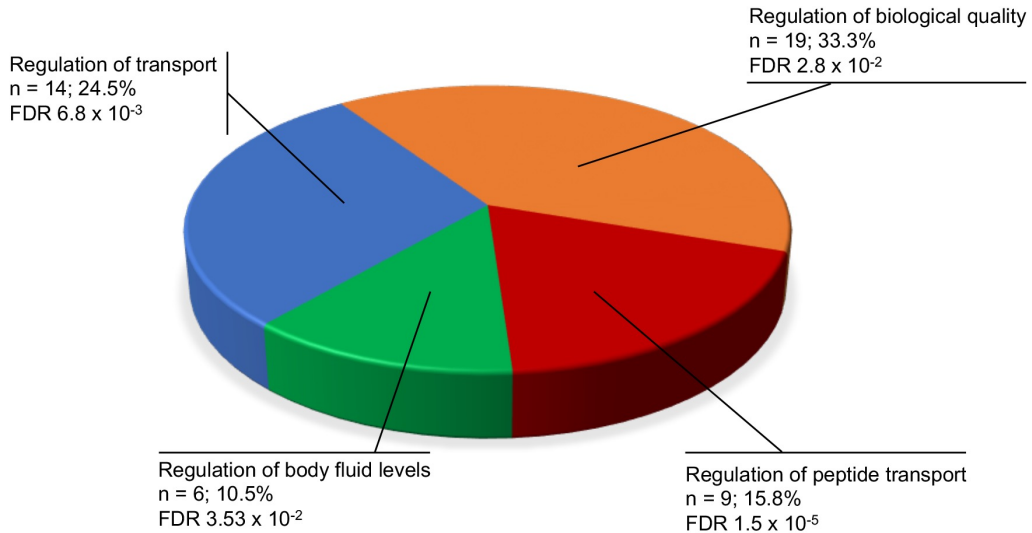
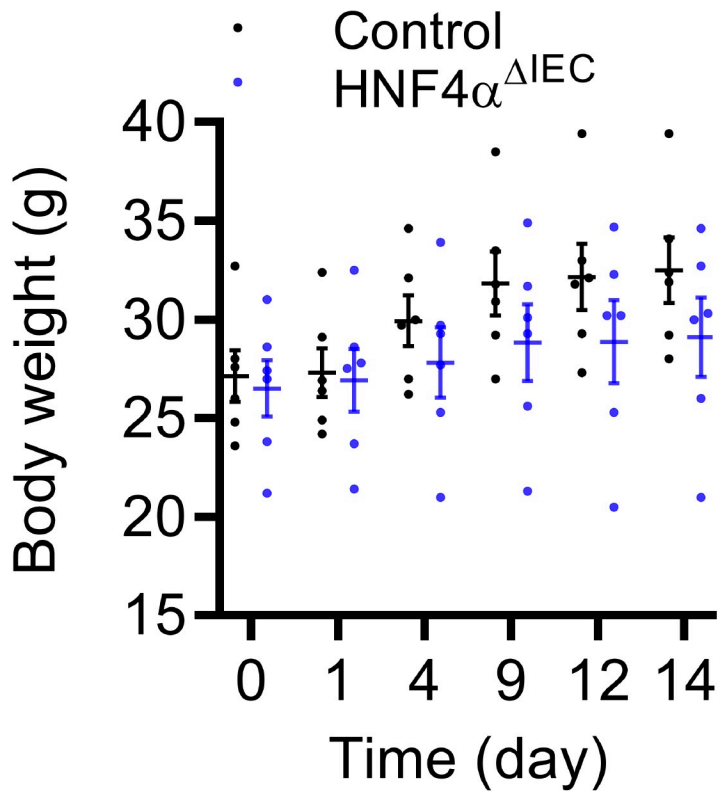


Supplemental Fig. S1: **Female mice lacking intestinal HNF4A were resistant to HFD-induced obesity.** Weight curve of weaned mice fed an HFD for 12 weeks for control (black squares, n = 7) and HNF4A ΔIEC mutant (red squares, n = 8) mice. Statistical comparisons were performed using two-way ANOVA followed by uncorrected Fisher's LSD test. Data are presented as mean values +/- SEM. Source data are provided as a Source Data file.

a**b**

Gene name	Gene symbol	Protein Class
Fibrinogen alpha chain	Fga	
Carbonic anhydrase 2	Car2	
C-C motif chemokine 5	Cd5	cytokine
Gastric inhibitory polypeptide	GIP	hormone
Hepatocyte nuclear factor 4-a	Hnf4a	Zinc finger nuclear receptor
Protein FAM3D	Famd3	Antimicrobial response protein
Immunoglobulin-like domain containing receptor 1	Ildr1	Immunoglobulin receptor superfamily
Fibrinogen beta chain	Fgb	Intercellular signal molecule
Fibrinogen gamma chain	Fgg	Intercellular signal molecule

Supplemental Fig. S2: **Transcriptomic analysis of the jejunum of HNF4A^{ΔIEC} mutants under HFD.** **a**, Biological functions associated with transcriptomic changes in the jejunum of HNF4A^{ΔIEC} mutants. **b**, List of genes significantly modulated in the jejunum of HNF4A^{ΔIEC} mutants and associated with regulation of peptide transport.



Supplemental Fig. S3: **Individual weight values of control (black points) and HNF4A ΔIEC mutant (blue points) mice fed an HFD as monitored for 2 weeks (n = 6).** Data are presented as mean values +/- SEM.