



**Supplementary Figure S18.** a-h) The expression of *Eut* operon (a), *Arid3a* (b), *miR101a-3p* (c), *Zo1* (d), gut permeability (FITC-dextran) (e), MTT (f) and ITT (g) on before (0 day) and after 1 day, 1 week and 1, 2, 3, 4 and 5 months of HFD feeding. Values presented are mean ( $n = 5-6$  mice per group) and error bars as the standard error of means. P values with  $*** < 0.001$  are statistically significant, calculated by the t-test and/or ANOVA.