

Supplemental material

Figure S1 hierarchical clustering including the non-kindled groups

Figure S2 Microbiota metabolites and cecum pH among all groups

Box and whisker plots of the cecum median total SCFA (A), acetate (B), propionate (C), butyrate (D), iso butyrate (E), valerate (F) and iso valerate levels (G), the resulting butyrate to propionate molar ratio (H), Box and whisker plots of ammonia levels (I) and pH values (J). Metabolite values are expressed in mmol/kg and values below the detection range are set to the lowest limit of detection and were excluded from the butyrate to propionate ratio analysis. Dots represent outliers. Significance was assessed by pairwise Wilcoxon test, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, **** $P < 0.0001$.

Table S1 correlation coefficients of correlations with phenotypic outcomes

Table S2 adjusted p-values of correlations with phenotypic outcomes