

**Supplemental figure 1.** (A) the bacterial  $\alpha$ -diversity (Shannon and Simpson indexes) of fecal microbiota at 21 d during the suckling period ( $n = 6$ , Kruskal-Wallis test). (B, C) Microbial composition on the phylum and genus levels at 21 d during the suckling period ( $n = 6$ ). (D) Quantification of isobutyrate and isovalerate level in feces of the pre- and post-weaning piglets. \* means  $P < 0.05$ , \*\* means  $P < 0.01$ , ns means  $P > 0.05$  (one-way ANOVA with Duncan). Con, control; Xos, xylooligosaccharides; Xyl, xylan.

# Supplemental fig 1.

