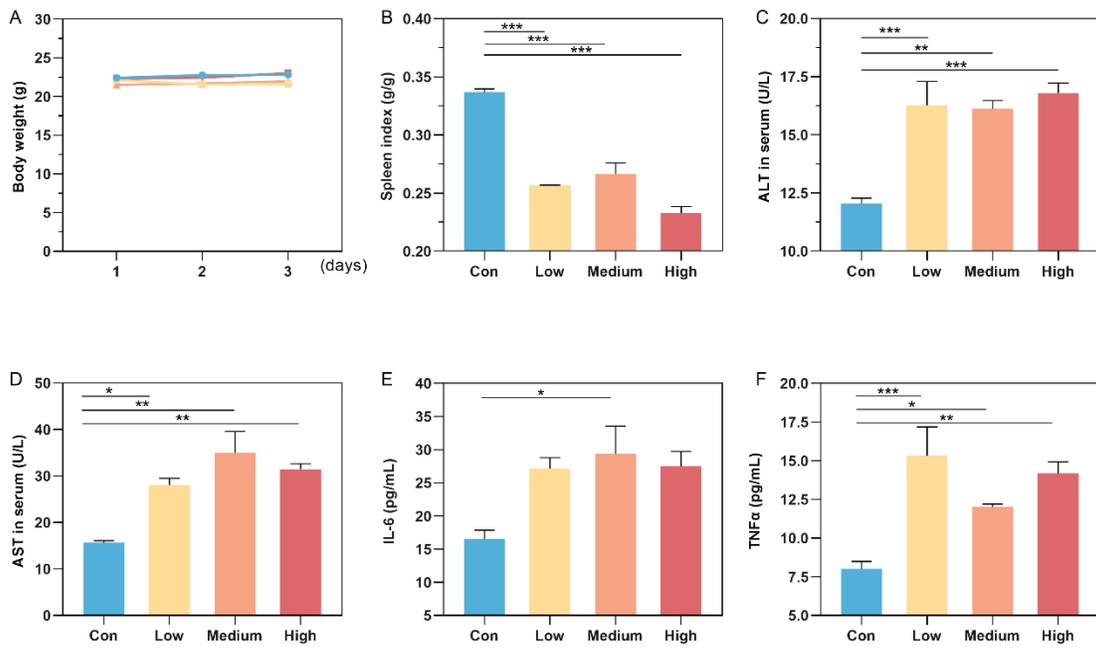
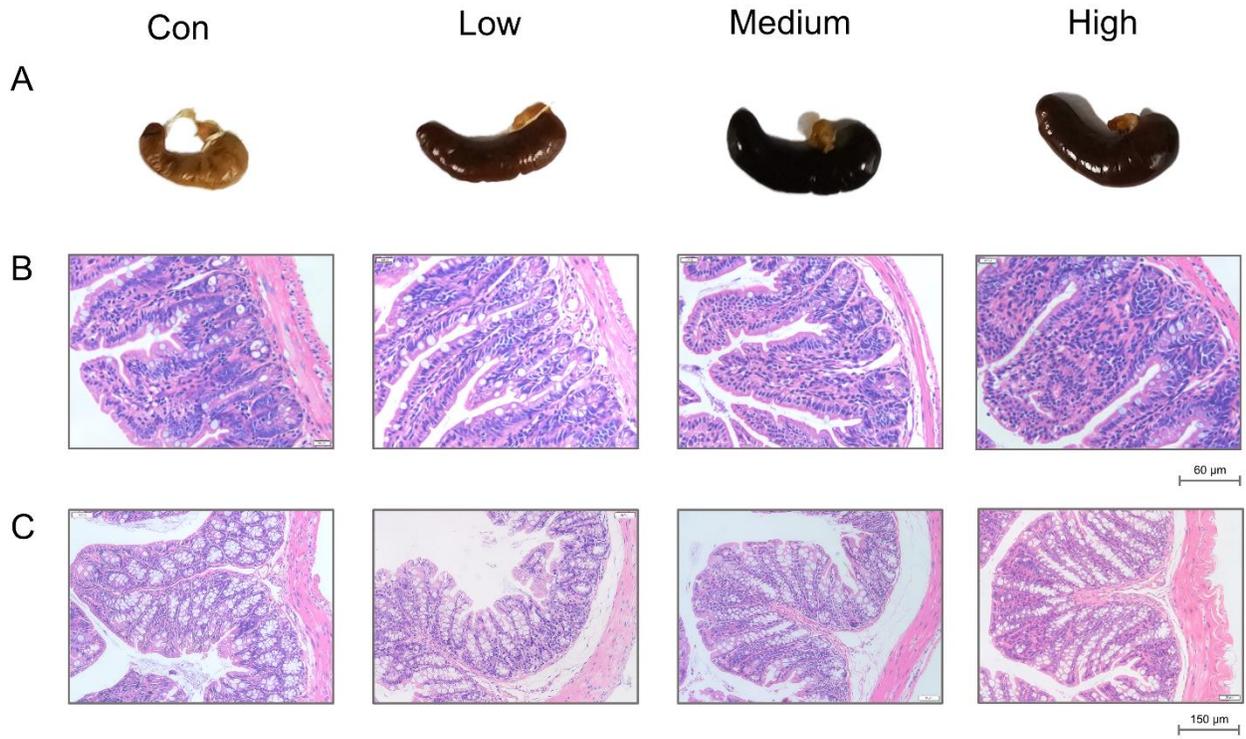


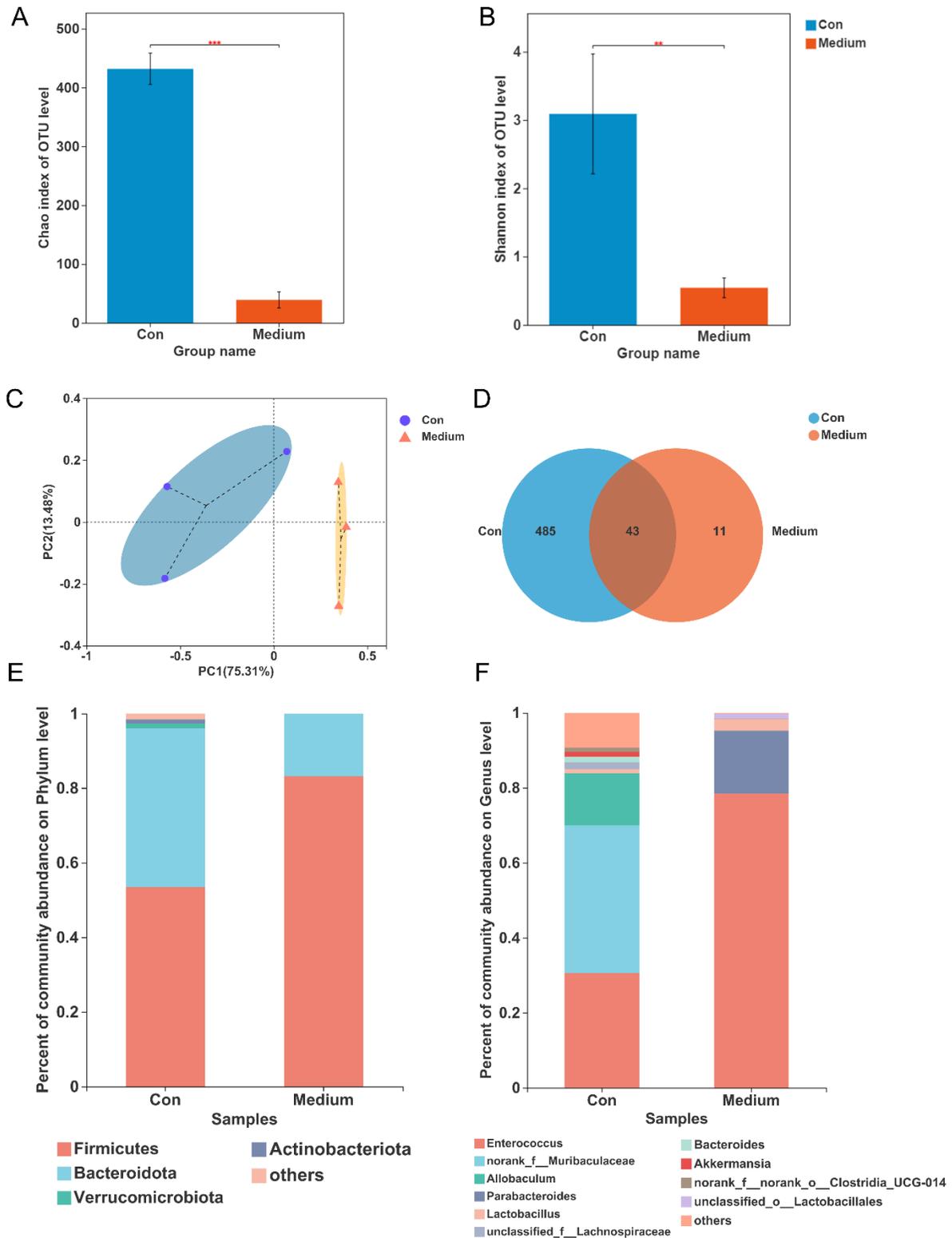
## Supplementary Materials



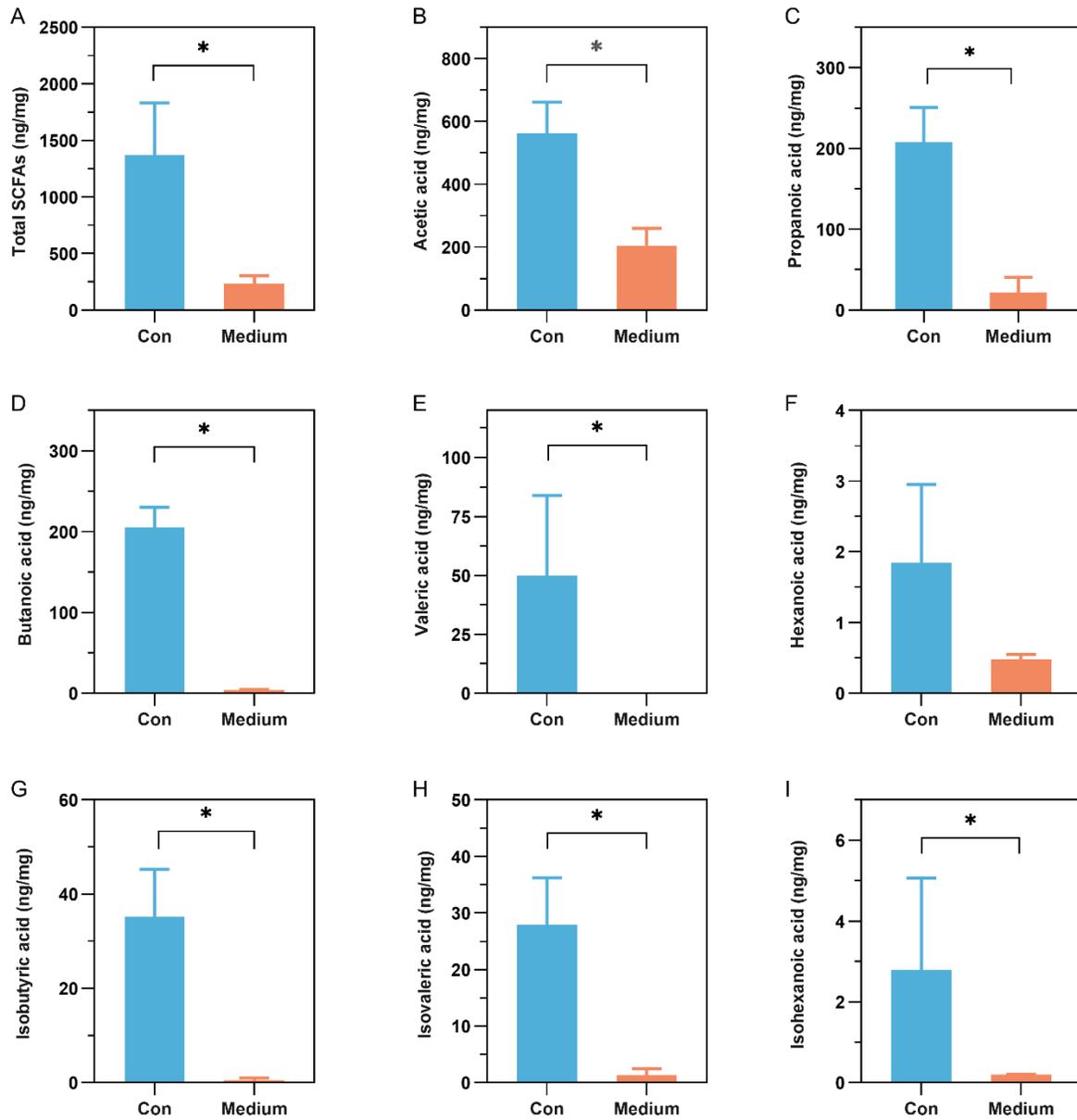
**Figure S1.** The effects of excessive ceftriaxone sodium on mouse weight (A), spleen index (B), and serum concentrations of ALT (C), AST (D), IL-6 (E), and TNF $\alpha$  (F). The values are displayed as mean  $\pm$  SEM. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .



**Figure S2.** The effects of excessive ceftriaxone sodium on mice intestinal damage. (A) Cecum tissues. (B) Ileum tissues. (C) Colon tissues.



**Figure S3.** The effects of excessive ceftriaxone sodium on gut microbiota. (A) Chao index. (B) Shannon index. (C) PCoA analysis. (D) Venn analysis. (E, F) The composition at the phylum and genus level, respectively. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .



**Figure S4.** The effects of excessive ceftriaxone sodium on SCFA production. The values are displayed as the mean  $\pm$  SEM. \* $p < 0.05$ .