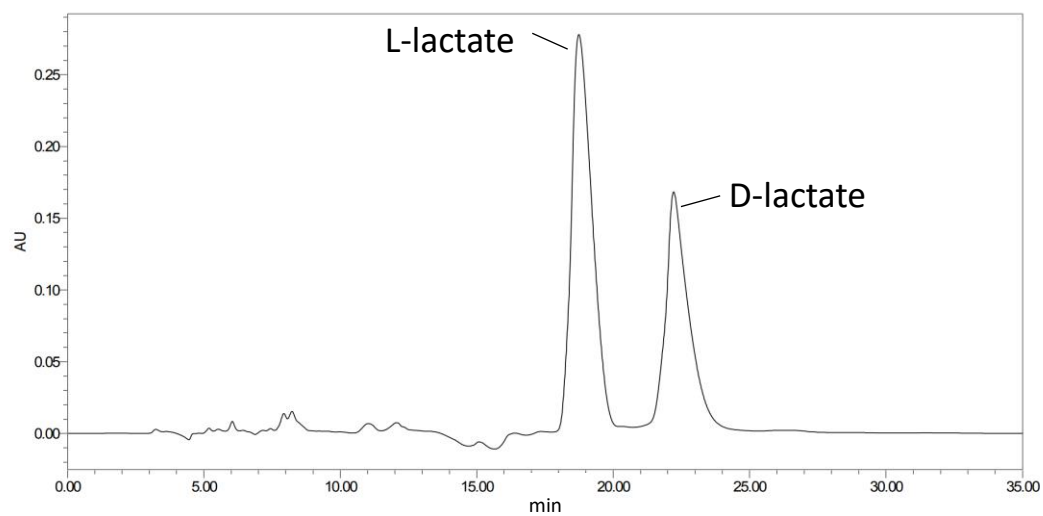


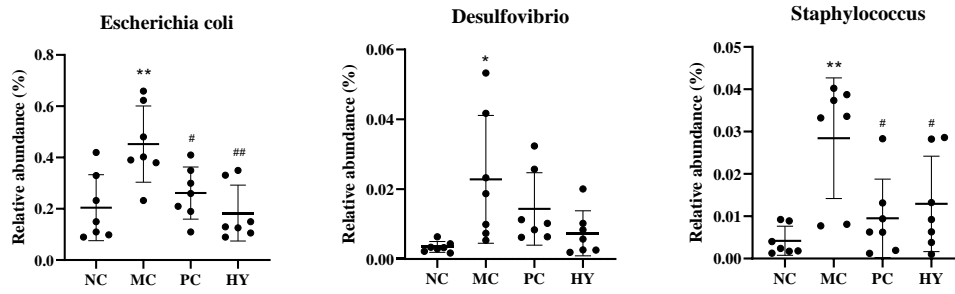
## Supplementary Materials



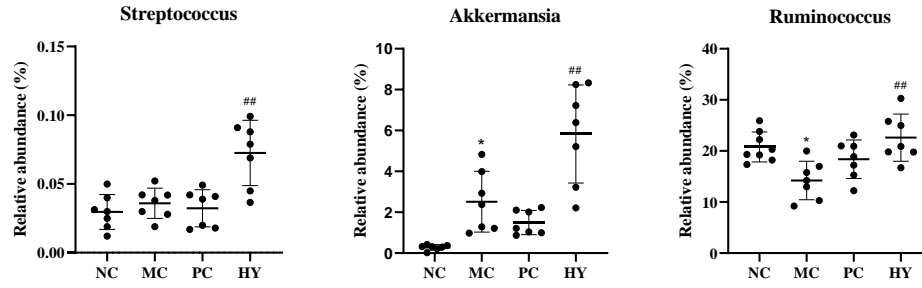
**Figure S1.** The chromatogram of lactate concentration in simulated commercial yogurt detected by high-performance liquid chromatography (HPLC).

**Table S1.** The lactate concentration in simulated commercial yogurt.

Ingredients	Lactate Content (mg/mL)	Lactate Ratio (%)
D-lactate	5.90±0.02	0.57±0.02
L-lactate	9.53±0.03	0.93±0.03
Total lactate	15.43±0.01	1.50±0.01



**Figure S2.** The relative abundance of *Escherichia coli*, *Desulfovibrio* and *Staphylococcus* in the fecal of CTX-induced mice. Statistical significance was evaluated by performing a one-way ANOVA followed by the Tukey test on the values presented as mean  $\pm$  SEM. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  vs. normal control group (NC). # $p < 0.05$ , ## $p < 0.01$ , ### $p < 0.001$  vs. model control group (MC).



**Figure S3.** The relative abundance of *Streptococcus*, *Akkermansia* and *Ruminococcus* in the fecal of CTX-induced mice. Statistical significance was evaluated by performing a one-way ANOVA followed by the Tukey test on the values presented as mean  $\pm$  SEM (n = 10). \* $p$  < 0.05, \*\* $p$  < 0.01, \*\*\* $p$  < 0.001 vs. normal control group (NC). # $p$  < 0.05, ## $p$  < 0.01, ### $p$  < 0.001 vs. model control group (MC).