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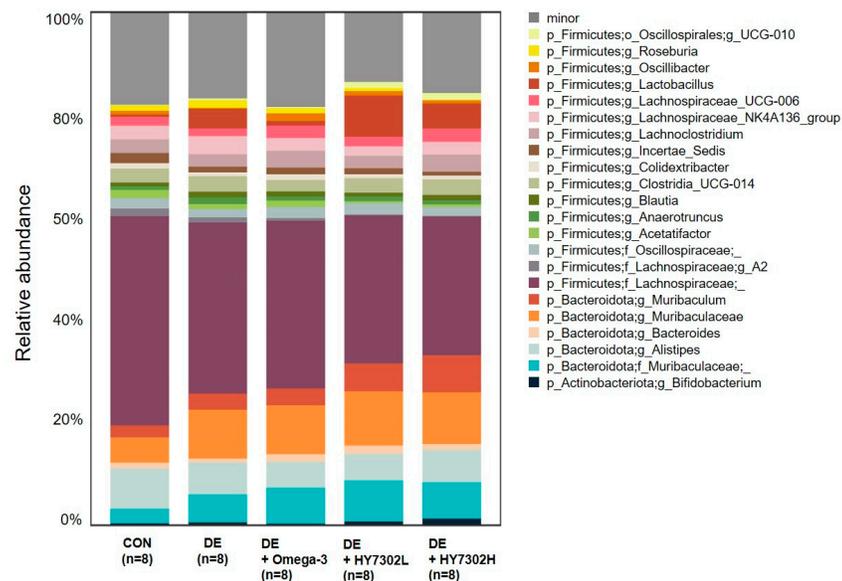
# Consumption of *Limosilactobacillus fermentum* Inhibits Corneal Damage and Inflammation in Dry Eye Disease Mouse Model through Regulating the Gut Microbiome

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**Figure S1. Effect of HY7302 on the taxonomy difference genus profile in BAC-induced cornea damag mice.** Taxonomic abundance comparisonat genus level from 16S rDNA sequencing. CON (Control group); DE (0.1% BAC treated group); DE +  $\Omega$ -3 (0.1% BAC with 200mg/mL omega-3 treated mice); DE + HY7302L (0.1% BAC with  $10^8$  CFU/mL HY7302 treated mice); DE + HY7302H (0.1% BAC with  $10^9$  CFU/mL HY7302 treated mice).



**Figure S2. Effect of HY7302 on microbial taxa differing in BAC-induced cornea damage.** Linear discriminant analysis effect size (LEfSe) results (A) a bar plot between DE (Dry Eye) and Control group. (B) Omega 3, (C) HY7302 L (Low concentration), and (D) HY7302 H (High concentration) compared to the DE group (LDA > 2.0)

