

Figure S1. Identification of probiotic strains. Probiotic strains were identified using six reference ASVs (ASV3180, ASV3239, ASV3331, ASV3596, ASV3695 and ASV4113). (**A**) Positive frequency of each ASV in the placebo and the probiotics group at baseline, week 4, week 8 and week 12. (**B**) Relative abundance of the six ASVs expressed as percentage of total abundance of genus *Lactobacillus* in the placebo and the probiotics group at baseline, week 4, week 8 and week 12.

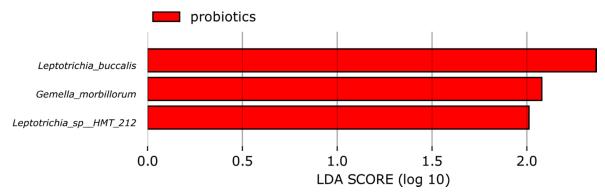


Figure S2. Probiotics-associated bacterial species. Linear discriminant analysis Effect Size (LEfSe) analysis demonstrating bacterial species associated with samples collected from the probiotics group versus the placebo group at week 12.