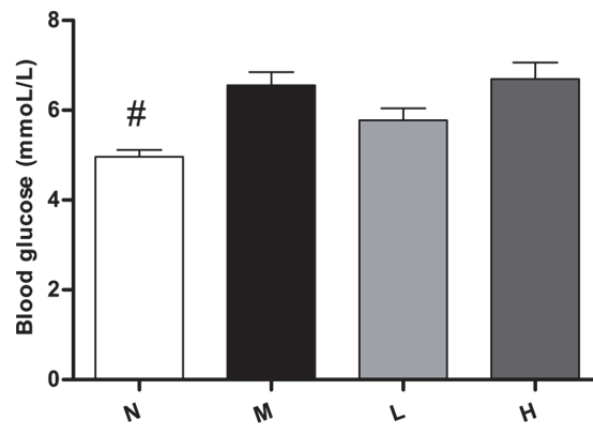
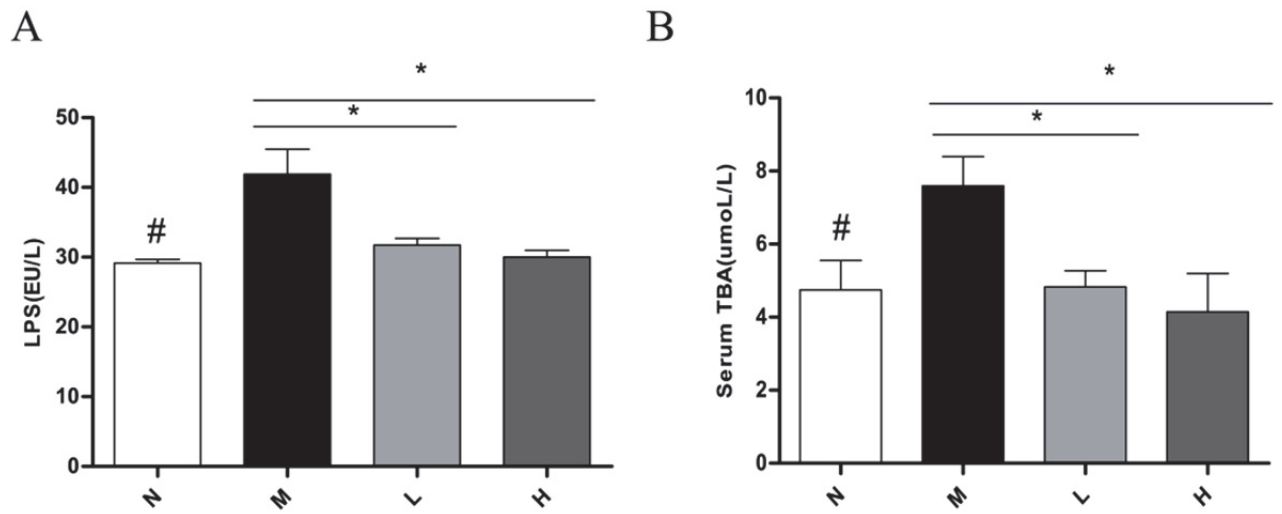


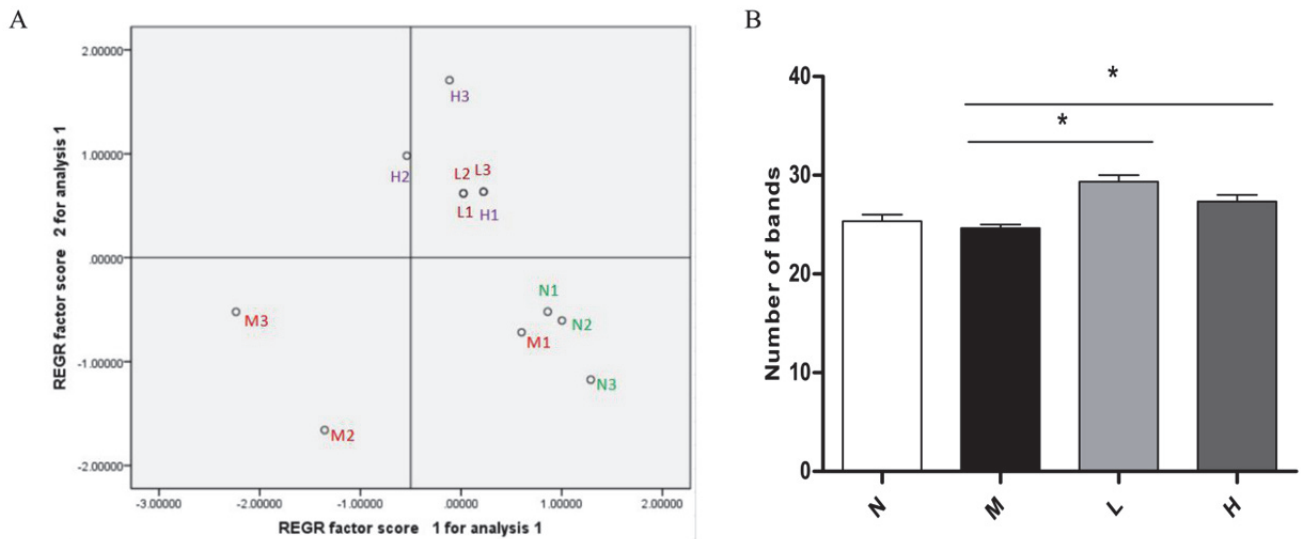
Supplementary material. 1. Effect of *Enterococcus faecium* R0026 on high cholesterol in vitro. (A) Low concentration. (B) High concentration.



Supplementary material. 2. Effect of LCBE in blood glucose. N, normal group; M, model group; L, low dose group; H, high dose group. # $P < 0.05$ the N vs. the M group, * $P < 0.05$ vs. the M group.

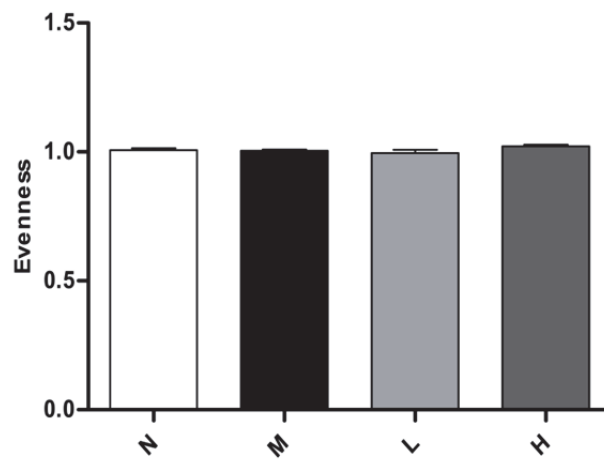


Supplementary material. 3. Effect of LCBE in serum inflammatory markers. (A) Serum lipopolysaccharide (LPS). (B) Serum total bile acid (TBA). N, normal group; M, model group; L, low dose group; H, high dose group. [#] $P < 0.05$ the N vs. the M group, ^{*} $P < 0.05$ vs. the M group.



Supplementary material. 4. Effect of LCBE in gut microbiota. (A) PCoA of 16S rRNA profiles. (B) Gut microbiota richness measures, number of DGGE bands. N, normal group; M, model group; L, low dose group; H, high dose group. [#] $P < 0.05$ the

N vs. the M group, $^*P < 0.05$ vs. the M group.



Supplementary material. 5. Effect of LCBE in gut microbiota. PCR-DGGE analysis the evenness of the gut microbiota. N, normal group; M, model group; L, low dose group; H, high dose group. $^{\#}P < 0.05$ the N vs. the M group, $^*P < 0.05$ vs. the M group.