

Supplementary Materials

Supplementary Material 1:

Table S1. Calculated disease activity index (DAI) score.

Score	Weight loss (%)	Stool consistency	Stool bleeding
0	no loss	normal	occult blood test-negative
1	1.0-5.0	soft but formed	occult blood test-positive
2	5.0-10.0	soft	slight
3	10.0-15.0	slight diarrhea	blood traces in stool
4	more than 15.0	watery diarrhea	gross rectal bleeding

Supplementary Material 2:

Table S2. Primer sequences for quantitative real-time PCR

Gene	Forward primer (5'–3')	Reverse primer (5'–3')
STAT3	GAGGAGGCATTCGGAAG	TCGTTGGTGTACACAGAT
PPAR γ	TGGGTGAACTCTGGGAGAT	CCATAGTGGAAGCCTGATGC
NF- κ B	CGCCCCTTATCGACCACC	CCTTCTCCCAAGAGTCGTCCA
COX2	GAAGTCTTTGGTCTGGTGCCTG	GTCTGCTGGTTTGGAATAGTTG
iNOS	CTTGGAGCGAGTTGTGGATTGTC	TAGGTGAGGGCTTGGCTGAGT
Nrf2	CCTCCGCTGCCATCAGTCAGT	TCGGCTGGGACTCGTGTTCA
MyD88	GCATGGTGGTGGTTGTTTCTG	GAATCAGTCGCTTCTGTTGG
Occludin	CCGGCCGCCAAGGTTC	GCTGATGTCACTGGTCACCTA
Claudin-1	GGCTTCTCTGGGATGGATCG	CCCCAGCAGGATGCCAATTA
ZO-1	GCCTTGAACCTTGACCTCTGC	GAAATCGTGCTGATGTGCCA
GAPDH	AGGTCGGTGTGAACGGATTTG	GGGGTCGTTGATGGCAACA

Supplementary Material 3:

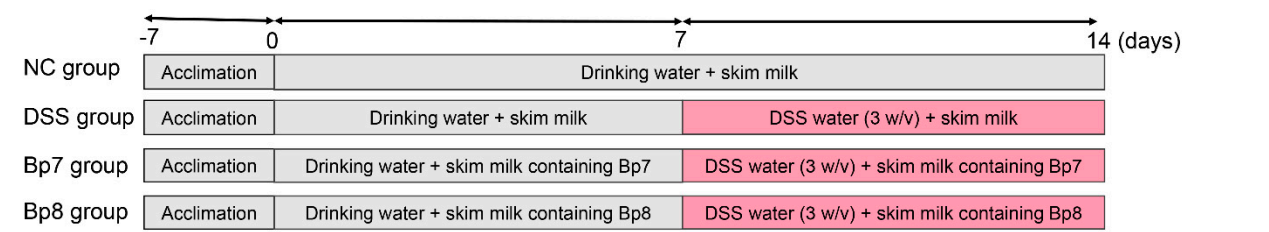


Figure S1 The flow chart of animal experiment.

Supplementary Material 4:

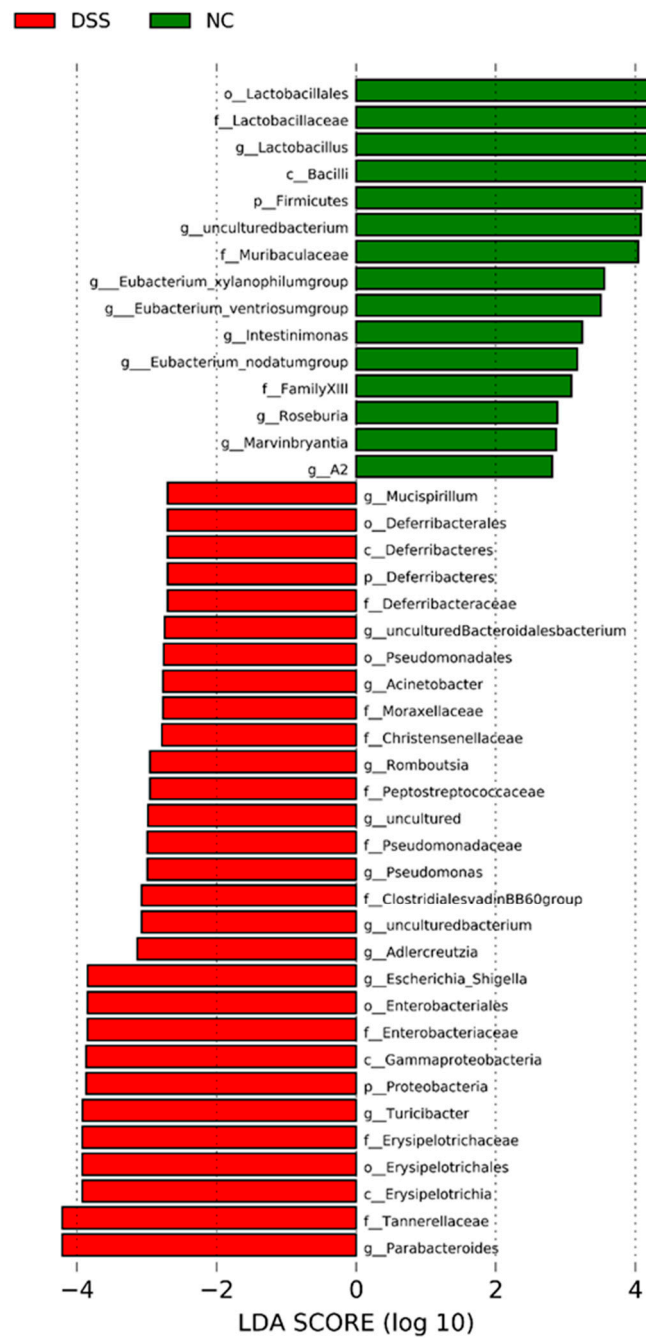


Figure S2. LEfSe identified the gut microbiota phylotypes with a statistically significant difference in abundance between NC and DSS groups.

Supplementary Material 5:

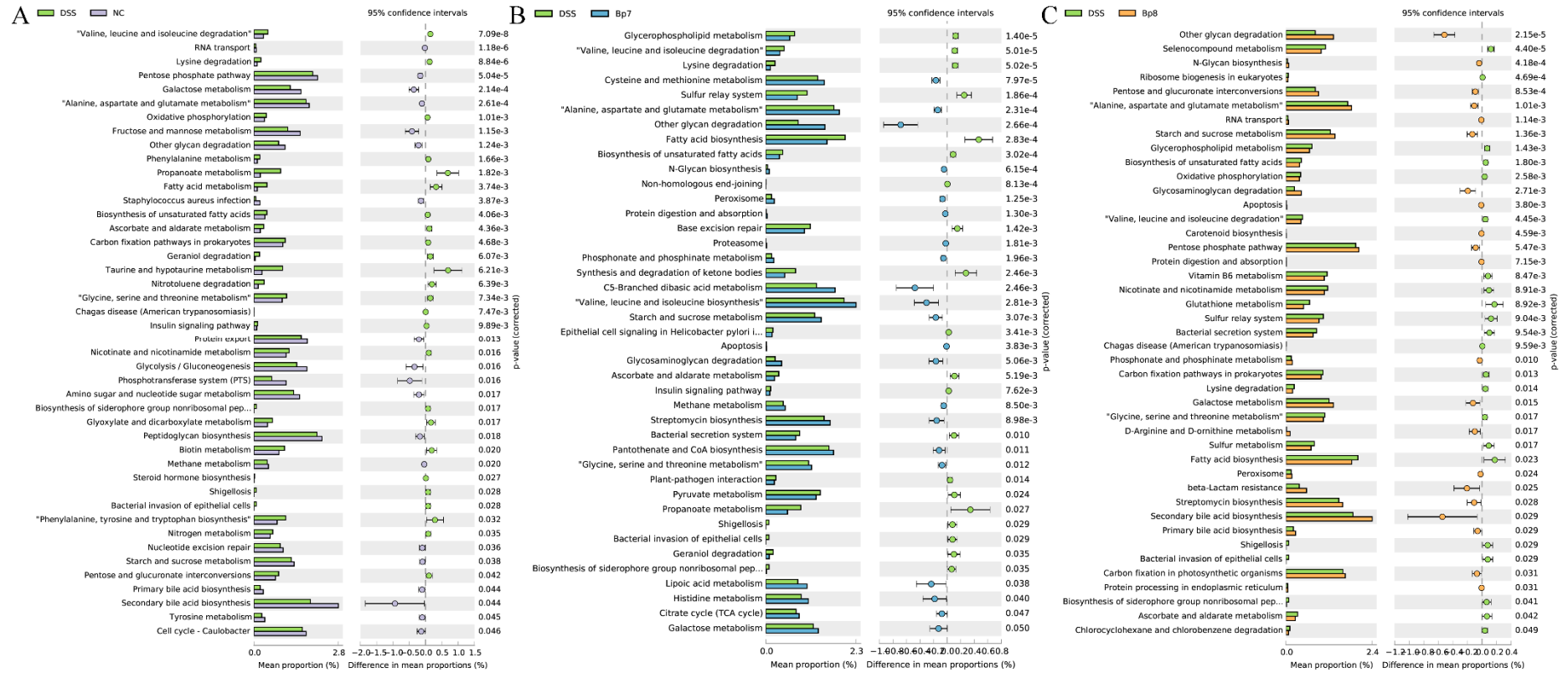


Figure S3. Predicted metabolic functions for the altered genes of intestinal microbiota. Metabolic pathways of NC vs DSS (A), Bp7 vs DSS (B) and Bp8 vs DSS (C).

Supplementary Material 6:

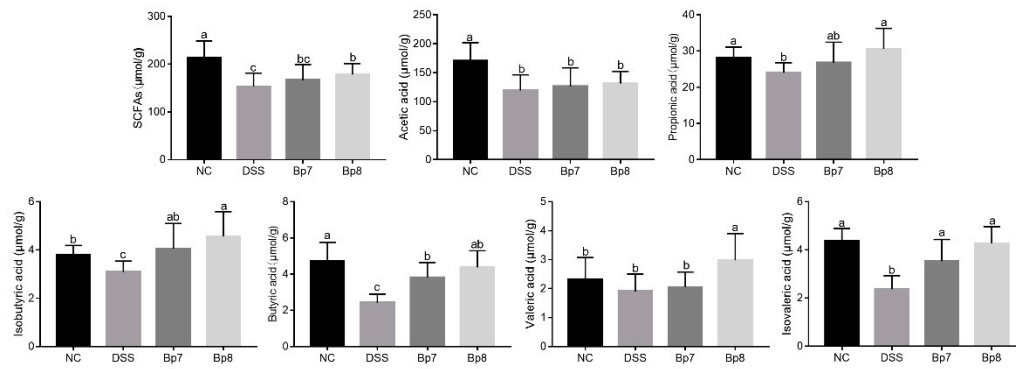


Figure S4. Influence of Bp7 and Bp8 intervention on the cecal SCFAs concentrations. Values are showed as the mean \pm SD (n = 8). The different letters represent significant differences between different experimental groups ($P < 0.05$).