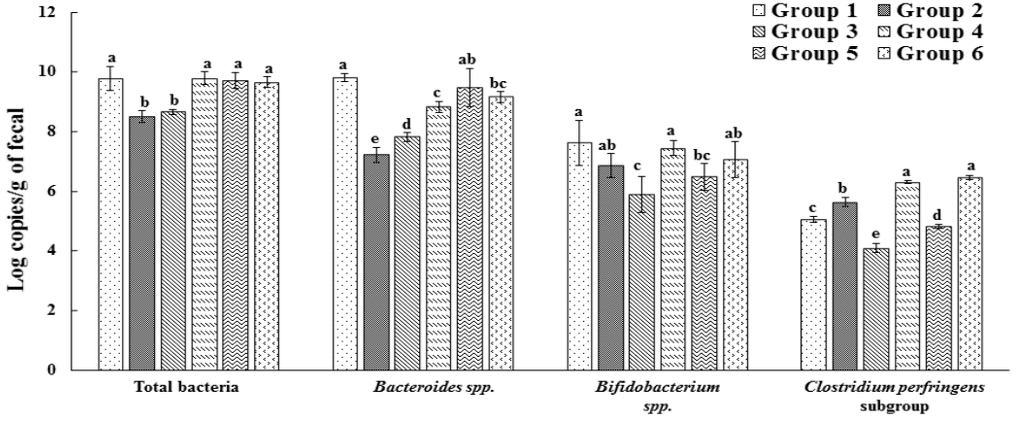
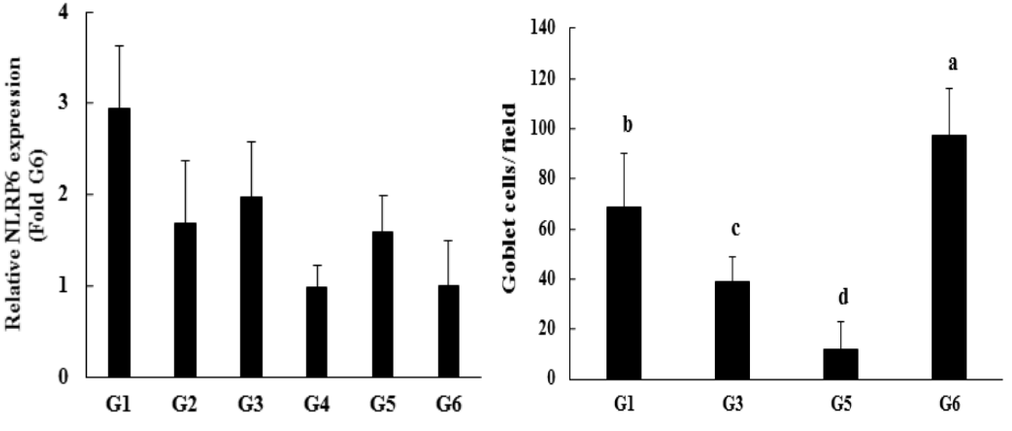
Wang Y and Hatabu T., Graphical abstract

Diet with mulberry fruit freeze-dried powder



Modulating contents of colon microbiota

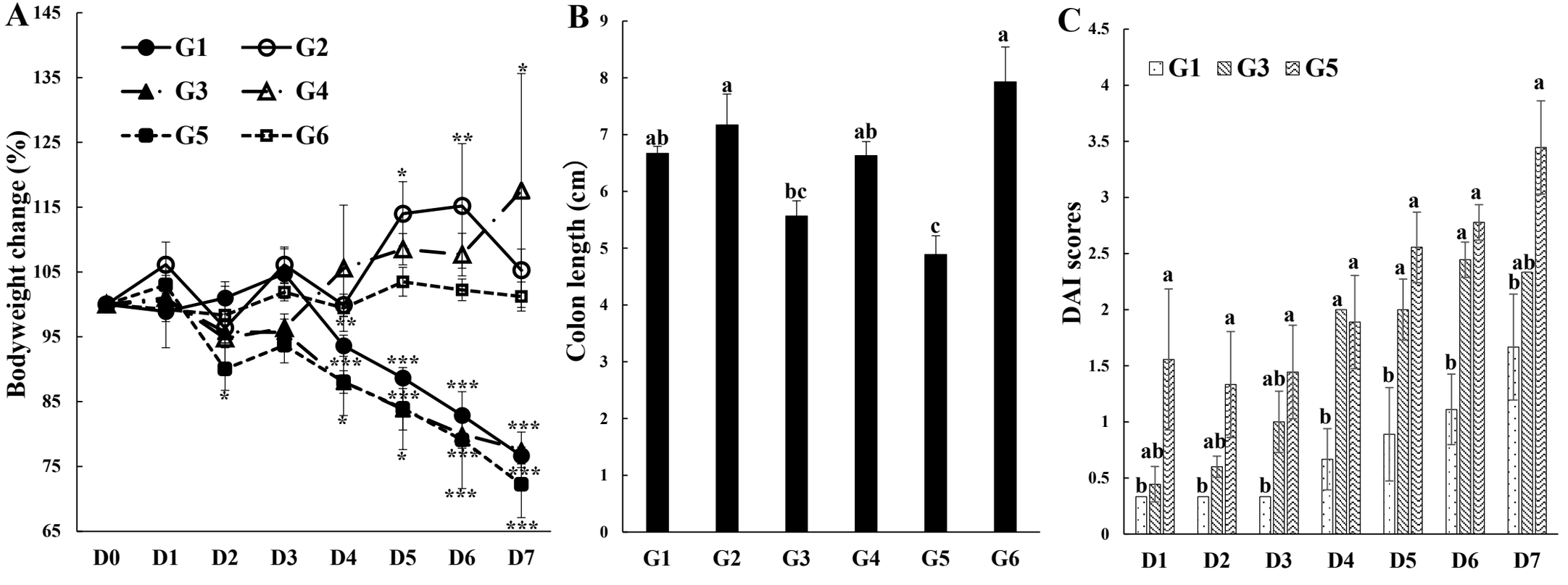


Upregulation of NLRP6 and maintenance of goblet cells

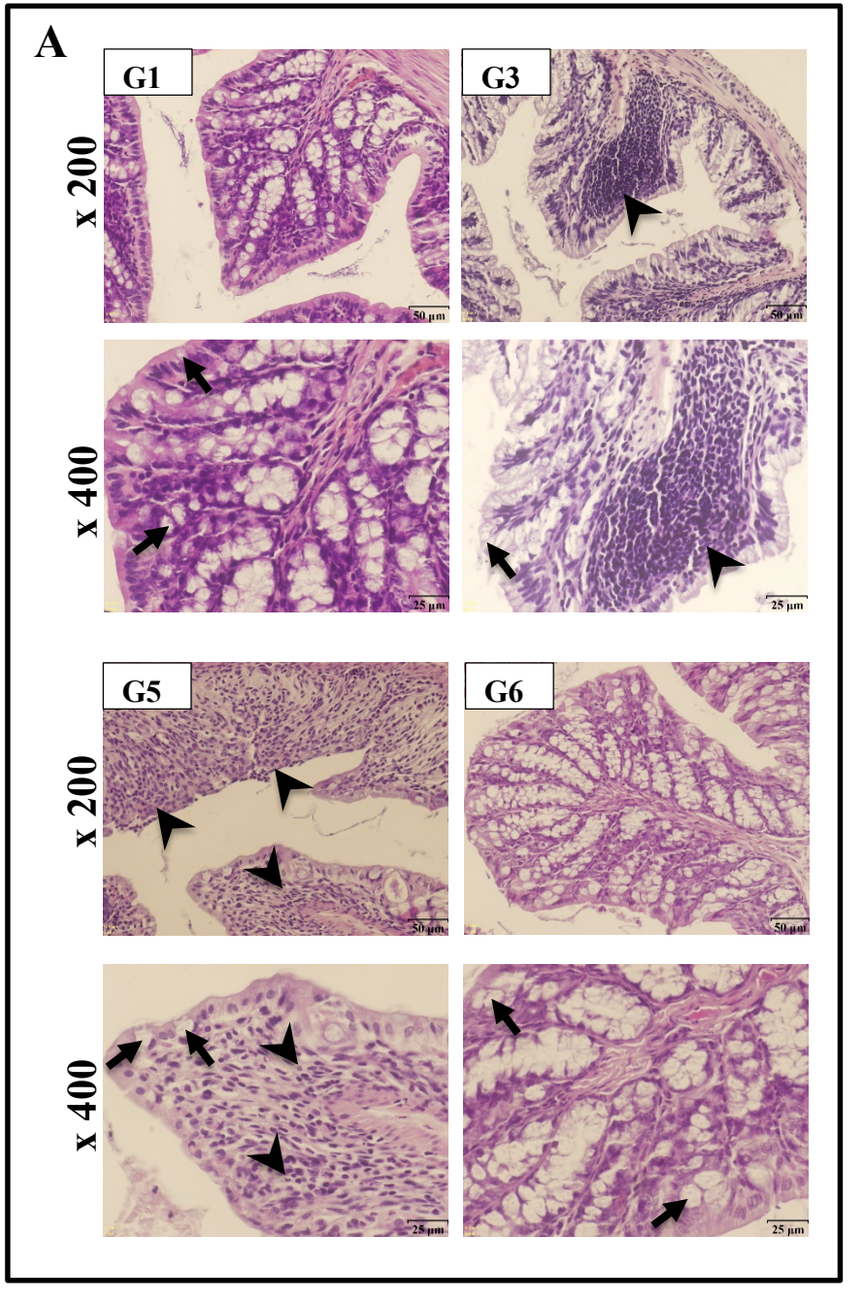
Maintenance of colonic epithelia and mitigation of the symptoms

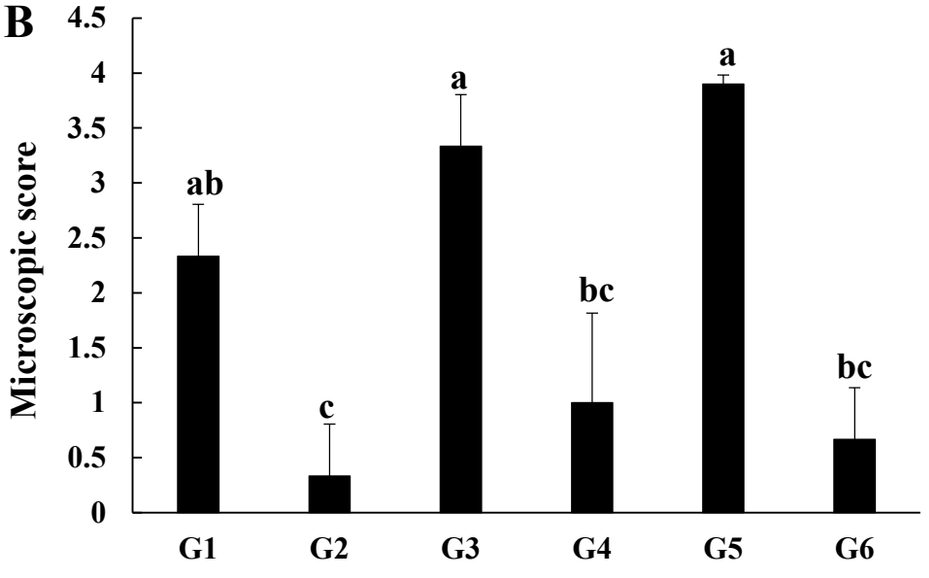
Caption: Mulberry fruit freeze-dried powder maintains the colonic microenvironment including bacterial balance in mice with DSS-induced acute colitis.

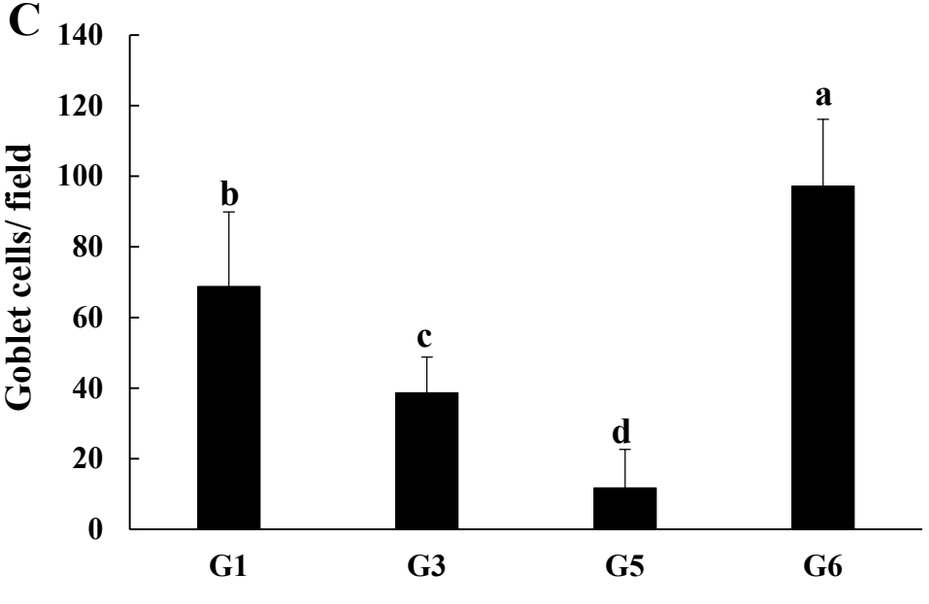
Wang Y and Hatabu T., Fig. 1



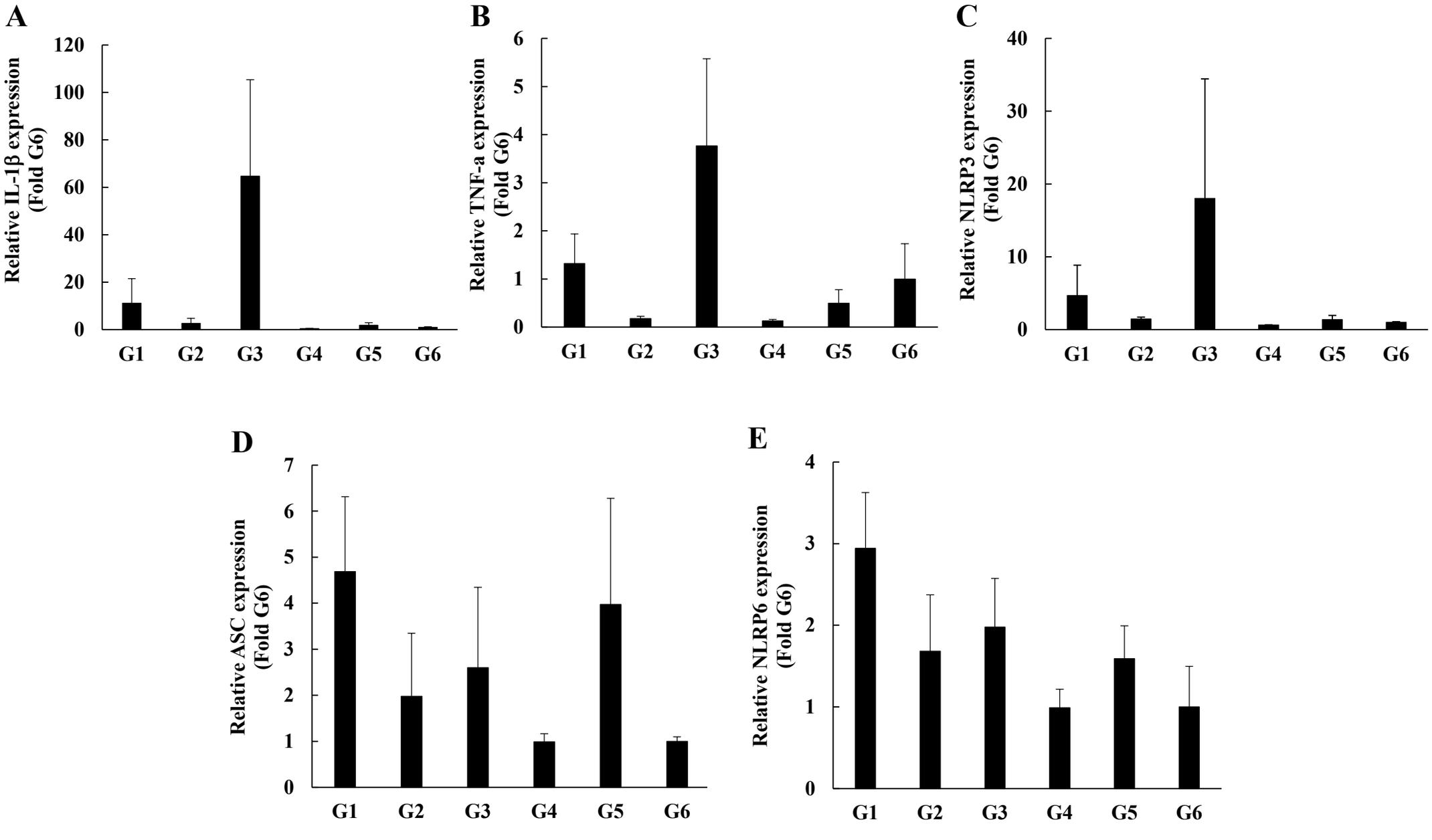
Wang Y and Hatabu T., Fig. 2







Wang Y and Hatabu T., Fig. 3



Wang Y and Hatabu T., Fig. 4

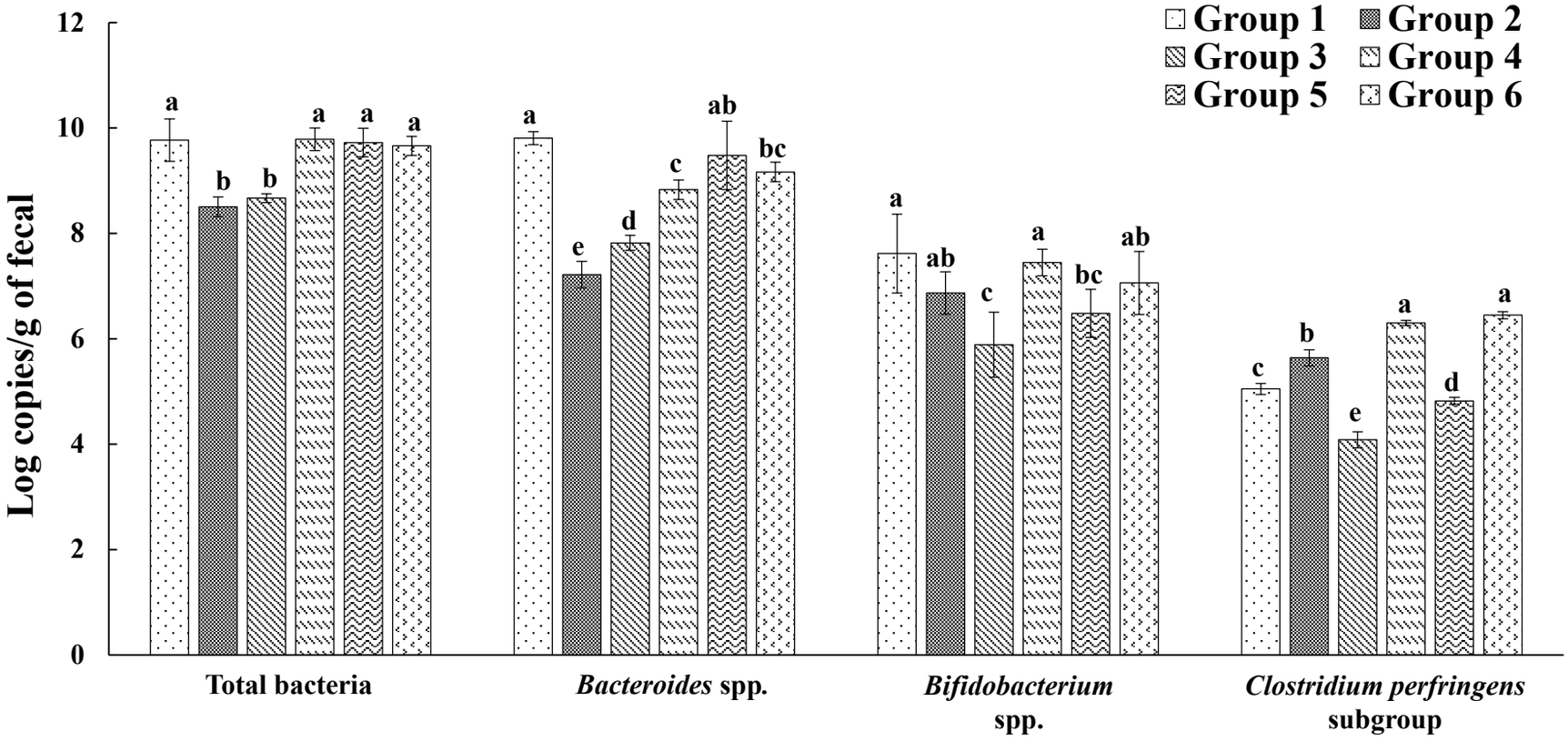


Table 1. The grouping of mice

n = 3	Week 0-3	Week 4	
	MFP	MFP	5% DSS
Group 1	+	+	+
Group 2	+	+	-
Group 3	+	-	+
Group 4	+	-	-
Group 5	-	-	+
Group 6	-	-	-

Table 2. The scoring system for disease activity index.

Score	Weight loss	Stool consistency	Bloody stool
0	None	Normal	None
1	1% - 5%	Loose stool	Occult bleeding
2	6% - 10%		
3	11% - 20%		
4	＞20%	Diarrhea	Gross bleeding

Table 3. The scoring system for histological damages

Extend of disease	Crypt Destruction	Degree of inflammation
None	None	No evidence
< 25%	1/3 destruction	Scattered infiltrating mononuclear cells (1 – 2 foci)
26 – 50%	2/3 destruction	Moderate inflammation with multiple loci
51 – 75%	Only epithelial intact	High level of inflammation with vascular density
76% <	Epithelium and Mucous layers are destructed	Maximal severity of inflammation and loss of goblet cells

Table 4. The Primer sets for cytokine and NLRPs

Primer sets 1		Primer sequence (5′- -3′)	Annealing temperature (°C)
IL-1β	forward	TCGGACCCATATGAGCTGA	52
	Reverse	CCACAGGTATTTTGTCGTTGC	
NLRP3	forward	ACCTCCAAGACCACTACGG	52
	Reverse	AAAACAACAGGCTAAGGA	
GAPDH	forward	GTTCCTACCCCCAATGTGTCC	52
	Reverse	TAGCCCAAGATACCCTTCAGT	

Primer sets 2		Primer sequence (5′- -3′)	Annealing temperature (°C)
TNF-α	forward	CATCTTCTCAAAATTCGAGTGACAA	60
	Reverse	TGGGAGTAGACAAGGTACAACCC	
ASC	forward	ACAGAAGTGGACGGAGTGCT	60
	Reverse	CTCCAGGTCATCACCAAGT	
NLRP6	forward	TGACCAGAGCTTCCAGGAGT	60
	Reverse	TTTAGCAGGCCAAAGAGGAA	
GAPDH	forward	AGGTCGGTGTGAACGGATTTG	60
	Reverse	TGTACACCATGTAGTTGAGGTCA	