

Table S1. Effect of BC-HYI on alpha diversity of intestinal microbiota of laying chickens.

Items	CON	LPS	B6	B7	B8	SEM	<i>P-value</i>
Chao	469.21 ^{Aa}	410.95 ^{Bb}	416.49 ^{Bb}	467.75 ^{Aa}	457.68 ^{Ab}	2.22	0.01
ACE	471.35 ^{Aa}	420.27 ^{Bb}	426.85 ^{Bb}	450.08 ^{Ab}	469.30 ^{Aa}	3.25	0.01
Simpson	0.08 ^{Aa}	0.11 ^{Ab}	0.08 ^{Aa}	0.07 ^{Aa}	0.08 ^{Aa}	0.01	0.04
Shannon	3.75 ^a	3.77	3.95	3.84	3.82	0.04	0.06

^{a, b} Values within a row with different letters are significantly different at $p < 0.05$; ^{A, B} Values within a row with different letters are statistically different at $p < 0.01$.

16S Data NCBI number: SUB9966958

Table S2. Effects of BC-HYI on the abundance of intestinal microbiota.

Items	CON	LPS	B6	B7	B8	SEM	<i>P-value</i>
<i>Barnesiella</i>	18.76 ^{Ab}	15.22 ^{Aa}	23.54 ^{Bb}	27.4 ^{Bb}	19.39 ^{Ab}	1.12	0.01
<i>Bacteroides</i>	11.64 ^{Aa}	19.21 ^{Ab}	3.58 ^{Bb}	9.64 ^{Bc}	6.18 ^{Cc}	1.44	0.01
<i>Lactobacillus</i>	6.74 ^{Aa}	6.37 ^{Aa}	8.02 ^{Ab}	10.31 ^{Bb}	21.65 ^{Cc}	1.51	0.01
<i>Blautia</i>	11.35 ^{Aa}	8.50 ^{Bb}	9.54 ^{Ab}	5.36 ^{Bb}	6.18 ^{Bc}	0.60	0.02
<i>Alistipes</i>	4.13 ^{Aa}	4.61 ^{Aa}	6.57 ^{Ab}	8.47 ^{Bb}	5.61 ^{Ab}	0.43	0.04
<i>Lachnospiraceae</i>	6.17 ^{Aa}	4.07 ^{Ab}	6.33 ^{Aa}	4.65 ^{Ab}	4.79 ^{Ab}	0.26	0.03
<i>Faecalibacterium</i>	8.68 ^{Aa}	2.63 ^{Bb}	7.49 ^{Aa}	4.99 ^{Ab}	5.53 ^{Ab}	0.56	0.01
<i>Clostridia</i>	4.10 ^{Aa}	6.13 ^{Ab}	4.70 ^{Aa}	6.43 ^{Ab}	2.80 ^{Bb}	0.37	0.03
<i>Romboutsia</i>	1.65 ^{Aa}	7.5 ^{Bb}	2.19 ^{Aa}	1.19 ^{Aa}	2.13 ^{Aa}	0.62	0.02
<i>Ruminococcus</i>	4.68 ^{Aa}	3.53 ^{Aa}	2.59 ^{Aa}	2.55 ^{Aa}	3.39 ^{Aa}	0.24	0.45

^{a, b} Values within a row with different letters differ at $p < 0.05$; ^{A, B} Values within a row with different letters differ at $p < 0.01$.

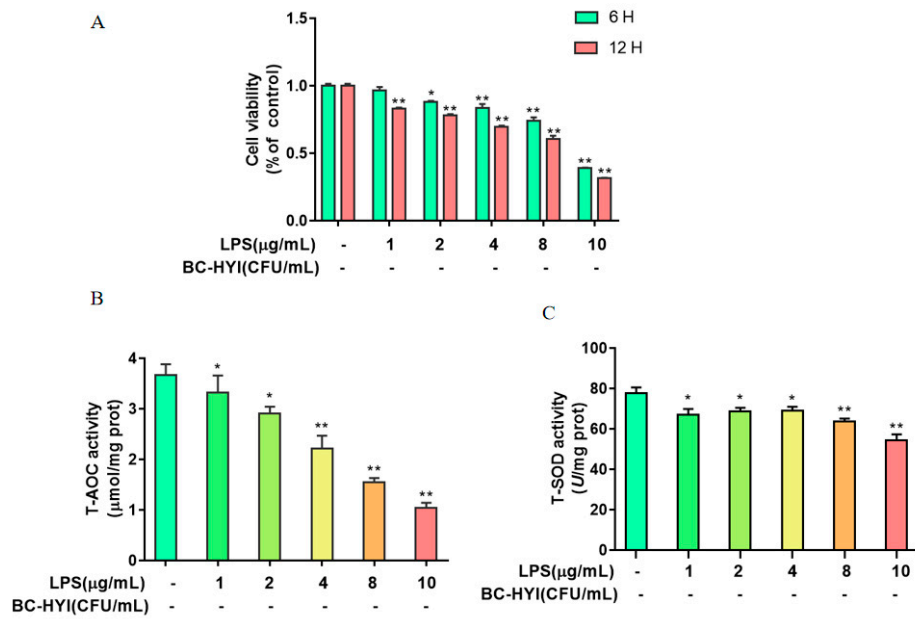


Figure S1. Effects of LPS on Viability and Oxidative Stress of DF-1 Cells. The results are representative of three independent experiments and expressed as means \pm SD. * $p < 0.05$, ** $p < 0.01$ compared with control group.