

Table S1. Effects of *Bacillus coagulans* body weight, food intake, and water intake in SD rats with loperamide-induced constipation

Group	Body weight (g)	Food intake (g/day)	Water intake (mL/day)
NOR	356.72±11.10 ^{ns}	33.71±0.15 ^{ns}	32.71±0.13
CON	363.02±4.03	33.80±0.03	33.29±0.08
PC	347.23±2.22	34.13±0.10	33.14±0.33
BCL	343.22±8.63	32.73±0.11	34.14±0.10 [#]
BCH	345.18±3.42	32.58±0.10	33.86±0.08

NOR: normal group; CON: loperamide-control group (5 mg/kg), PC: lactulose (2010 mg/kg); BCL: low dose of *Bacillus coagulans* treated group (1.0×10^7 CFU/day); BCH: high dose of *Bacillus coagulans* treated group (2.0×10^9 CFU/day). Data are expressed means±standard error of the mean (S.E.M) (n=6). Different symbols indicated significant at [#]p<0.05 vs. NOR group according to Tukey's test. ns: not significant.

Table S2. Effects of *Bacillus coagulans* organ weight (g/100 g of body weight) in SD rats with loperamide-induced constipation

Group	Liver	Heart	Kidney	Spleen	Intestine
NOR	3.19±0.05 ^{ns}	0.40±0.01 ^{ns}	0.84±0.02 ^{ns}	0.23±0.01 ^{ns}	3.10±0.08 ^{ns}
CON	3.06±0.04	0.42±0.01	0.82±0.01	0.21±0.01	3.12±0.05
PC	3.26±0.07	0.38±0.01	0.82±0.01	0.22± 0.004	3.37±0.09
BCL	3.05±0.03	0.39± 0.01	0.85±0.01	0.20± 0.01	3.25±0.10
BCH	3.29±0.05	0.40± 0.01	0.88±0.01	0.20±0.01	3.21±0.09

NOR: normal group; CON: loperamide-control group (5 mg/kg), PC: lactulose (2010 mg/kg); BCL: low dose of *Bacillus coagulans* treated group (1.0×10^7 CFU/day); BCH: high dose of *Bacillus coagulans* treated group (2.0×10^9 CFU/day). Data are expressed means±standard error of the mean (S.E.M) (n=6). ns: not significant.

Table S3. Effects of *Bacillus coagulans* on serum biochemical parameters in SD rats with loperamide-induced constipation

Group	Glucose (mg/dL)	TG (mg/dL)	TCHO (mg/dL)	AST (U/L)	ALT (U/L)
NOR	258.33±10.18 ^{ns}	55.33±1.81 ^{ns}	94.50±4.43 ^{ns}	65.67±1.88 ^{ns}	29.83±1.59 ^{ns}
CON	257.50±12.02	60.83±4.12	93.00±3.50	63.00±1.68	27.33±0.49
PC	259.67±17.90	50.50±1.44	87.33±2.17	65.50±1.56	29.33±0.88
BCL	295.50±14.29	65.50±1.30	83.17±1.97	67.17±4.02	35.17±4.74
BCH	267.67±6.38	64.83±1.07	87.50±1.56	67.83±2.29	33.33±1.62

NOR: normal group; CON: loperamide-control group (5 mg/kg), PC: lactulose (2010 mg/kg); BCL: low dose of *Bacillus coagulans* treated group (1.0×10^7 CFU/day); BCH: high dose of *Bacillus coagulans* treated group (2.0×10^9 CFU/day). Data are expressed means $\pm$ standard error of the mean (S.E.M) (n=6). TG: triglyceride, TCHO: total cholesterol, AST: aspartate transaminase, ALT: alanine aminotransferase, ns: not significant.