

Table S1 Methods of culturing gut dominant bacteria

Medium	bacterium	Culture time/h	Culture temperature/°C	Aerobic conditions
MRS	<i>Lactobacillus</i>	48	37	aerobic
BBL	<i>Bifidobacterium</i>	48	37	anaerobic
EMB	<i>Escherichia</i>	24	37	aerobic
Agar	<i>Enterococci</i>	24	37	aerobic
DRCA	<i>Clostridium</i>	48	37	anaerobic
BBE	<i>Bacteroid</i>	48	37	anaerobic

Table S2 Body-weight-related measurements of animals fed with a normal or HC diet supplemented with or without PT for 4 weeks.

	Initial body weight (g)	Final body weight (g)	Food intake (g/day)
NC	172±3	371±5	16.7±0.5
NC/LPT	174±2	373±2	17.1±0.4
NC/MPT	176±1	369±4	16.9±0.7
NC/HPT	169±4	351±8	16.1±0.3
HC	171±4	357±3	17.8±0.5
HC/LPT	177±2	359±6	16.6±0.2
HC/MPT	170±3	361±4	16.8±0.4
HC/HPT	175±2	366±7	18.1±0.7
	<i>NS (p>0.05)</i>	<i>NS (p>0.05)</i>	<i>NS (p>0.05)</i>

NC, normal control group; NC/LPT, normal control with low dose (50 mg/kg·body weight) of persimmon tannin group; NC/MPT, normal control with moderate dose (100 mg/kg·body weight) of persimmon tannin group; NC/HPT, normal control with high dose (200 mg/kg·body weight) of persimmon tannin group. HC, high-cholesterol group; HC/LPT, high-cholesterol with low dose (50 mg/kg·body weight) of persimmon tannin group; HC/MPT, high-cholesterol with moderate dose (100 mg/kg·body weight) of persimmon tannin group; HC/HPT, high-cholesterol with high dose (200 mg/kg·body weight) of persimmon tannin group. All results were expressed as the mean±S.E.M (n=6). Statistical analysis were performed using one-way ANOVA of SPSS (IBM, ver. 19.0), with Duncan's multiple-range test. Data in each column were nonsignificantly different with $p>0.05$.

Table S3 Relative abundance (% of total 16S rDNA) of detected bacterial genus in faeces of normal diet rats (NC) supplemented or not with different doses of persimmon tannin for 4 weeks.

genus	NC	NC/LPT	NC/MPT	NC/HPT
<i>Prevotella</i>	27.49±2.63	44.72±2.90*	26.46±2.71	23.17±2.12
<i>Oscillospira</i>	12.48±1.60	11.48±0.88	10.38±1.18	11.20±1.33
<i>Desulfovibrio</i>	2.45±0.20	2.15±0.15	1.44±0.10	5.66±0.54*
<i>Bacteroides</i>	2.12±0.19	1.27±0.14*	2.54±0.18	3.24±0.36
<i>Phascolarctobacterium</i>	1.16±0.21	0.47±0.03*	0.59±0.03	1.10±0.16
<i>Roseburia</i>	0.94±0.05	1.06±0.09	0.99±0.08	0.86±0.09
<i>Lactobacillus</i>	0.85±0.09	0.22±0.02*	1.28±0.12*	0.27±0.03*
<i>Coprococcus</i>	0.70±0.06	0.69±0.03	0.32±0.03	0.49±0.02
<i>Escherichia</i>	0.13±0.01	0.10±0.01*	0.13±0.03	0.15±0.01

NC, normal control group; NC/LPT, normal control with low dose (50 mg/kg·body weight) of persimmon tannin group; NC/MPT, normal control with moderate dose (100 mg/kg·body weight) of persimmon tannin group; NC/HPT, normal control with high dose (200 mg/kg·body weight) of persimmon tannin group. Results were expressed as mean±S.E.M. (n=6). Values in columns marked with * indicated a significant difference ($p<0.05$) versus NC group.

Table S4 Relative abundance (% of total 16S rDNA) of detected bacterial genus in faeces of high-cholesterol diet rats (HC) supplemented or not with different doses of persimmon tannin for 4 weeks.

Genus	HC	HC/LPT	HC/MPT	HC/HPT
<i>Prevotella</i>	12.21±1.48*	3.18±0.25*	12.61±0.60*	12.29±1.07*
<i>Roseburia</i>	9.62±1.17*	3.52±0.37#	6.76±0.75	4.33±0.53
<i>Oscillospira</i>	6.84±0.50*	9.29±0.96#	8.01±0.59	5.44±0.17*
<i>Helicobacter</i>	6.69±0.88*	5.64±0.44#	8.07±0.90*	8.02±0.74*
<i>Phascolarctobacterium</i>	1.74±0.14	1.80±0.17	2.58±0.13	3.83±0.28
<i>Ruminococcus</i>	1.99±0.17	2.88±0.22	2.49±0.25	1.86±0.12
<i>Bacteroides</i>	2.06±0.21	1.20±0.15#	1.13±0.16	1.65±0.17
<i>Sutterella</i>	1.16±0.15	0.70±0.03	0.38±0.01	1.73±0.18
<i>Desulfovibrio</i>	1.12±0.12	1.61±0.19	1.84±0.02	1.54±0.15

HC, high-cholesterol group; HC/LPT, high-cholesterol with low dose (50 mg/kg·body weight) of persimmon tannin group; HC/MPT, high-cholesterol with moderate dose (100 mg/kg·body weight) of persimmon tannin group; HC/HPT, high-cholesterol with high dose (200 mg/kg·body weight) of persimmon tannin group. Results were expressed as mean±S.E.M. (n=6). Values in columns marked with * indicated a significant difference ($p<0.05$) versus NC group, # indicated a significant difference ($p<0.05$) versus HC group.