Fig. S1 Accumulation of total Se and Se in protein fraction by *B. longum* DD98 under different concentration of inorganic Se in medium
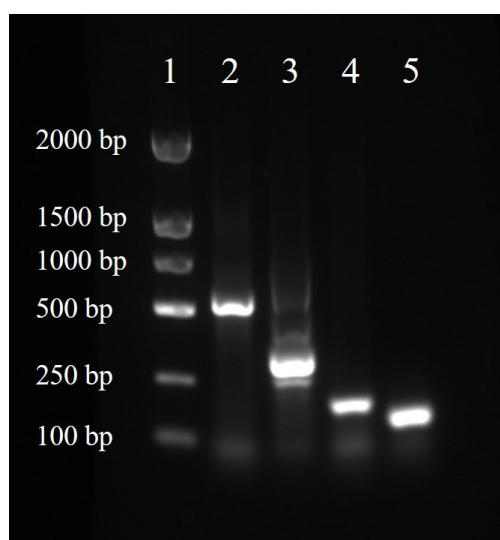

Fig. S2 Agarose gel (1%) electrophoresis image for specific DNA products of targeted bacteria (i.e., 1, marker; 2, Bifidobacterium; 3, Lactobacillus; 4, Enterobacter; 5, Enterococcus).

Table S1 PCR primers used for qPCR

Target bacterial group	Primer	Oligonucleotide sequence (5' → 3')	Product size (bp)	Annealing temperature (°C)	Reference
Bifidobacterium	Bifid-F	CTCCTGGAAACGGGTGG	550	59.4	(Matsuki, Watanabe, Fujimoto, Takada, & Tanaka, 2004)
	Bifid-R	GGTGTTCTTCCCGATATCTAC			
Lactobacillus	Lac-F	AGCAGTAGGGAATCTTCCA	341	57.7	(Rinttila, Kassinen, Malinen, Krogius, & Palva, 2004)
	Lac-R	CACCGCTACACATGGAG			
Enterococcus	Enco-F	CCCTTATTGTTAGTTGCCATCATT	144	57.7	(Rinttila et al., 2004)
	Enco-R	ACTCGTTGTACTTCCCATTGT			
Enterobacter	Eco1457F	CATTGACGTTACCCGCAGAAGAAGC	195	61.5	(Bartosch, Fite, Macfarlane, & McMurdo, 2004)
	Eco1652R	CTCTACGAGACTCAAGCTTGC			

Table S2 Amplification slopes, efficiencies, and correlation coefficients of qPCR assays for

studied intestinal bacterial groups

Target bacterial group	Slope	Amplification efficiency (%)	Correlation coefficient
Bifidobacterium	-3.395 ± 0.061	97.06	0.999
Lactobacillus	-3.416 ± 0.090	96.22	0.998
Enterobacter	-3.461 ± 0.035	94.49	0.999
Enterococcus	-3.315 ± 0.025	100.3	0.999