

**Supplemental Table 1.** Bacterial genera whose relative abundances changed in both the placebo and the MGT groups during the experimental period

Taxonomy			Placebo group			MGT group		
Order	Family	Genus	Pre-consumption (Week 0)	Post-consumption (Week 2)	p value	Pre-consumption (Week 0)	Post-consumption (Week 2)	p value
Common difference with placebo group								
Actinomycetales	<i>Micrococcaceae</i>	<i>Rothia</i>	0.012 ± 0.021	0.002 ± 0.004	0.05*	0.026 ± 0.028	0.004 ± 0.005	<0.01**
Bacteroidales	[ <i>Paraprevotellaceae</i> ]	<i>Paraprevotella</i>	0.456 ± 0.899	0.318 ± 0.696	0.02*	0.311 ± 0.274	0.150 ± 0.604	0.02*
Bacteroidales	<i>Bacteroidaceae</i>	<i>Bacteroides</i>	27.532 ± 10.195	31.658 ± 10.046	0.01*	24.409 ± 5.971	33.068 ± 8.471	<0.01**
Clostridiales	Unclassified	Unclassified	0.871 ± 0.682	0.351 ± 0.304	<0.01**	0.808 ± 0.467	0.411 ± 0.486	<0.01**
Clostridiales	<i>Christensenellaceae</i>	Unclassified	0.841 ± 1.325	0.046 ± 0.078	<0.01**	1.690 ± 1.474	0.094 ± 0.213	<0.01**
Clostridiales	<i>Dehalobacteriaceae</i>	<i>Dehalobacterium</i>	0.009 ± 0.012	0.003 ± 0.007	0.02*	0.013 ± 0.011	0.003 ± 0.004	<0.01**
Clostridiales	<i>Eubacteriaceae</i>	<i>Pseudoramibacter_Eubacterium</i>	0.010 ± 0.017	0.001 ± 0.004	0.04*	0.011 ± 0.009	0.003 ± 0.008	0.01*
Clostridiales	<i>Ruminococcaceae</i>	<i>Clostridium</i>	0.014 ± 0.020	0.002 ± 0.004	0.02*	0.017 ± 0.014	0.003 ± 0.005	<0.01**
Clostridiales	<i>Ruminococcaceae</i>	<i>Faecalibacterium</i>	4.631 ± 2.886	6.486 ± 4.183	0.03*	5.060 ± 3.547	6.843 ± 4.526	0.04*
Clostridiales	<i>Ruminococcaceae</i>	<i>Oscillospira</i>	2.332 ± 1.925	1.262 ± 1.304	0.03*	3.396 ± 2.350	1.508 ± 1.881	0.03*
Clostridiales	Other	Other	0.082 ± 0.072	0.022 ± 0.020	<0.01**	0.109 ± 0.071	0.051 ± 0.065	0.04*
Coriobacteriales	<i>Coriobacteriaceae</i>	Unclassified	0.038 ± 0.051	0.007 ± 0.013	0.02*	0.062 ± 0.058	0.028 ± 0.058	0.02*
Desulfovibrionales	<i>Desulfovibrionaceae</i>	<i>Desulfovibrio</i>	0.056 ± 0.062	0.013 ± 0.018	0.03*	0.091 ± 0.074	0.036 ± 0.108	0.01*
Enterobacteriales	<i>Enterobacteriaceae</i>	<i>Enterobacter</i>	0.110 ± 0.157	0.008 ± 0.024	0.01*	0.229 ± 0.178	0.006 ± 0.014	<0.01**
Enterobacteriales	<i>Enterobacteriaceae</i>	<i>Klebsiella</i>	1.989 ± 2.637	0.249 ± 0.722	0.02*	3.669 ± 2.747	0.098 ± 0.132	<0.01**
Enterobacteriales	<i>Enterobacteriaceae</i>	<i>Serratia</i>	0.358 ± 0.794	0.023 ± 0.050	0.01*	0.519 ± 1.550	0.043 ± 0.088	<0.01**
Lactobacillales	<i>Enterococcaceae</i>	<i>Enterococcus</i>	0.166 ± 0.329	0.090 ± 0.193	0.04*	0.172 ± 0.115	0.053 ± 0.123	<0.01**
Methanobacteriales	<i>Methanobacteriaceae</i>	<i>Methanobrevibacter</i>	0.074 ± 0.123	0.001 ± 0.002	0.02*	0.150 ± 0.152	0.002 ± 0.006	<0.01**
RF39	Unclassified	Unclassified	0.012 ± 0.019	<0.001	0.02*	0.028 ± 0.028	0.003 ± 0.006	<0.01**
Synergistales	<i>Synergistaceae</i>	<i>Cloacibacillus</i>	0.048 ± 0.081	<0.001	0.02*	0.110 ± 0.096	0.009 ± 0.036	<0.01**
Verrucomicrobiales	<i>Verrucomicrobiaceae</i>	<i>Akkermansia</i>	1.355 ± 1.964	0.783 ± 2.808	0.05*	3.365 ± 2.667	0.850 ± 2.068	<0.01**
Victivallales	<i>Victivallaceae</i>	<i>Victivallis</i>	0.033 ± 0.059	<0.001	0.02*	0.069 ± 0.061	0.001 ± 0.006	<0.01**

\*p<0.05, \*\*p<0.01.