

S3 Table. The 16 significantly detected genera (FDR adjusted P-value < 0.05)

Phylum	Family	Genus	P_value	FDR	logFC
Bacteroidetes	[Paraprevotellaceae]	CF231	0.000138	2.84E-03	-2.96525
Bacteroidetes	Bacteroidaceae	Bacteroides	0.004042	3.65E-02	1.151583
Bacteroidetes	Flavobacteriaceae	Flavobacterium	0.006028	4.82E-02	-2.39396
Cyanobacteria	Synechococcaceae	Synechococcus	3.11E-05	7.95E-04	-4.64196
Euryarchaeota	Methanobacteriaceae	Methanobrevibacter	9.94E-06	3.31E-04	-3.87502
Firmicutes	Lachnospiraceae	Pseudobutyrvibrio	1.03E-05	3.31E-04	4.216203
Firmicutes	Ruminococcaceae	Faecalibacterium	0.00016	2.84E-03	-1.13834
Firmicutes	Erysipelotrichaceae	[Eubacterium]	0.001157	1.65E-02	-2.05939
Firmicutes	Veillonellaceae	Megamonas	0.002199	2.17E-02	-1.9666
Firmicutes	Veillonellaceae	Mitsuokella	0.004282	3.65E-02	-2.63018
Proteobacteria	Enterobacteriaceae	Citrobacter	2.44E-11	3.13E-09	-9.2212
Proteobacteria	Enterobacteriaceae	Klebsiella	6.26E-09	4.01E-07	-5.49062
Proteobacteria	Halomonadaceae	Candidatus Portiera	0.000177	2.84E-03	-3.57809
Proteobacteria	Enterobacteriaceae	Enterobacter	0.00147	1.83E-02	-3.41043
Proteobacteria	Vibrionaceae	Aliivibrio	0.001576	1.83E-02	2.468071
Synergistetes	Dethiosulfovibrionaceae	Pyramidobacter	0.001797	1.92E-02	3.771663