

WT water versus WT CMC - Feces

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.0011	0.0061	0.0008	0.0054	0.0011
Root;k_Bacteria;p_Bacteroidetes	0.0201	0.4096	0.5277	-0.1181	0.0408
Root;k_Bacteria;p_Cyanobacteria	0.1675	0.0011	0.0026	-0.0015	0.0010
Root;k_Bacteria;p_Deferribacteres	0.1592	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes	0.0203	0.4978	0.3796	0.1182	0.0409
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.6174	0.0790	0.0848	-0.0058	0.0112
Root;k_Bacteria;p_TM7	0.0036	0.0003	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes	0.6116	0.0059	0.0045	0.0015	0.0028
Root;k_Bacteria;p_Verrucomicrobia					

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.0011	0.0061	0.0008	0.0054	0.0011
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.0201	0.4096	0.5277	-0.1181	0.0408
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.1541	0.0008	0.0025	-0.0016	0.0010
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.3049	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.1592	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.2075	0.0987	0.1465	-0.0478	0.0349
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.0108	0.3572	0.2050	0.1522	0.0461
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.4133	0.0419	0.0281	0.0138	0.0160
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.0937	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.0027	0.0085	0.0335	-0.0250	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.3526	0.0466	0.0320	0.0146	0.0148
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.4198	0.0239	0.0192	0.0047	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria					
Root;k_Bacteria;p_TM7;c_TM7-3	0.0036	0.0003	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.6116	0.0059	0.0045	0.0015	0.0028
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae					

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.0011	0.0061	0.0008	0.0054	0.0011
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.0201	0.4096	0.5277	-0.1181	0.0408
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.1541	0.0008	0.0025	-0.0016	0.0010
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.3049	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	0.1592	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.0444	0.0665	0.1462	-0.0797	0.0335
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.0032	0.0322	0.0003	0.0319	0.0077
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.0023	0.0248	0.0077	0.0171	0.0039
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.0184	0.3186	0.1926	0.1261	0.0427
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.0034	0.0137	0.0047	0.0091	0.0022
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.4133	0.0419	0.0281	0.0138	0.0160
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.3466	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.5994	0.0000	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.0027	0.0085	0.0335	-0.0250	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.3526	0.0466	0.0320	0.0146	0.0148
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.4198	0.0239	0.0192	0.0047	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.0036	0.0003	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.5604	0.0057	0.0040	0.0017	0.0028
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.4698	0.0002	0.0004	-0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales					

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.0011	0.0061	0.0008	0.0054	0.0011
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.1521	0.0004	0.0013	-0.0009	0.0006
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.1741	0.0381	0.0702	-0.0321	0.0215
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.7081	0.0040	0.0033	0.0006	0.0016
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.4986	0.0178	0.0234	-0.0056	0.0079
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.2638	0.0117	0.0074	0.0043	0.0036
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.0058	0.3348	0.4201	-0.0853	0.0229
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.1020	0.0028	0.0019	0.0009	0.0005
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.1541	0.0008	0.0025	-0.0016	0.0010
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.3049	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.1592	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_;					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.0444	0.0664	0.1459	-0.0795	0.0334
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.1256	0.0000	0.0003	-0.0002	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.0032	0.0322	0.0003	0.0319	0.0077

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_; f_	0.0023	0.0248	0.0077	0.0171	0.0039
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.8259	0.0008	0.0007	0.0001	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.7999	0.0027	0.0031	-0.0004	0.0016
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	< 0.0001	0.0029	0.0007	0.0022	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.0246	0.2520	0.1509	0.1011	0.0366
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.0482	0.0602	0.0372	0.0230	0.0099
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.0048	0.0095	0.0029	0.0067	0.0017
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.0249	0.0042	0.0018	0.0024	0.0009
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.3975	0.0418	0.0274	0.0144	0.0161
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.0560	0.0001	0.0006	-0.0006	0.0002
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_;	0.3466	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.5994	0.0000	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcigenaceae	0.0029	0.0085	0.0333	-0.0248	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae	0.0152	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.3526	0.0466	0.0320	0.0146	0.0148
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.4198	0.0239	0.0192	0.0047	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040;f_F16	0.0036	0.0003	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales;f_Acholeplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales;f_Anaeroplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales;f_Mycoplasmataceae	0.5604	0.0057	0.0040	0.0017	0.0028
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39;f__	0.4698	0.0002	0.0004	-0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae					

WT water versus WT CMC - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria	0.0963	0.0003	0.0001	0.0002	0.0001
Root;k__Bacteria;p__Bacteroidetes	0.0817	0.1839	0.0537	0.1303	0.0654
Root;k__Bacteria;p__Cyanobacteria	0.1225	0.0033	0.0012	0.0021	0.0012
Root;k__Bacteria;p__Deferribacteres	0.0309	0.0001	0.0010	-0.0009	0.0004
Root;k__Bacteria;p__Firmicutes	0.5854	0.4676	0.3917	0.0759	0.1336
Root;k__Bacteria;p__Planctomycetes	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k__Bacteria;p__Proteobacteria	0.2617	0.3393	0.5302	-0.1909	0.1581
Root;k__Bacteria;p__TM7	0.6563	0.0001	0.0001	0.0000	0.0001
Root;k__Bacteria;p__Tenericutes	0.1512	0.0053	0.0215	-0.0161	0.0102
Root;k__Bacteria;p__Verrucomicrobia	0.1070	0.0000	0.0006	-0.0006	0.0003

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria	0.696	0.000	0.000	0.000	0.000
Root;k__Bacteria;p__Actinobacteria;c__Thermoleophilia					
Root;k__Bacteria;p__Bacteroidetes;c__Bacteroidia	0.509	0.109	0.166	-0.057	0.083
Root;k__Bacteria;p__Bacteroidetes;c__Flavobacteriia					
Root;k__Bacteria;p__Bacteroidetes;c__Sphingobacteriia					
Root;k__Bacteria;p__Cyanobacteria;c__4C0d-2	0.370	0.002	0.004	-0.002	0.002
Root;k__Bacteria;p__Cyanobacteria;c__Chloroplast	0.347	0.000	0.000	0.000	0.000
Root;k__Bacteria;p__Deferribacteres;c__Deferribacteres	> 0.9999	0.000	0.000	0.000	0.000
Root;k__Bacteria;p__Firmicutes;c__Bacilli	0.302	0.016	0.007	0.009	0.008
Root;k__Bacteria;p__Firmicutes;c__Clostridia	0.969	0.443	0.448	-0.005	0.123
Root;k__Bacteria;p__Firmicutes;c__Erysipelotrichi	0.403	0.001	0.002	-0.001	0.001
Root;k__Bacteria;p__Planctomycetes;c__Planctomycetia	0.347	0.000	0.000	0.000	0.000
Root;k__Bacteria;p__Proteobacteria;c__Alphaproteobacteria	0.775	0.001	0.001	0.000	0.001
Root;k__Bacteria;p__Proteobacteria;c__Betaproteobacteria	0.229	0.001	0.006	-0.005	0.004
Root;k__Bacteria;p__Proteobacteria;c__Deltaproteobacteria	0.603	0.015	0.020	-0.005	0.010
Root;k__Bacteria;p__Proteobacteria;c__Epsilonproteobacteria	0.648	0.403	0.322	0.082	0.172
Root;k__Bacteria;p__Proteobacteria;c__Gammaproteobacteria	0.332	0.000	0.001	0.000	0.000
Root;k__Bacteria;p__TM7;c__TM7-3	0.983	0.000	0.000	0.000	0.000
Root;k__Bacteria;p__Tenericutes;c__Mollicutes	0.187	0.007	0.022	-0.015	0.010
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae	0.097	0.000	0.000	0.000	0.000

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Bifidobacteriales	0.4637	0.0002	0.0001	0.0001	0.0001
Root;k__Bacteria;p__Actinobacteria;c__Thermoleophilia;o__Solirubrobacterales					
Root;k__Bacteria;p__Bacteroidetes;c__Bacteroidia;o__Bacteroidales	0.5091	0.1090	0.1660	-0.0570	0.0826
Root;k__Bacteria;p__Bacteroidetes;c__Flavobacteriia;o__Flavobacteriales					
Root;k__Bacteria;p__Bacteroidetes;c__Sphingobacteriia;o__Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.3696	0.0022	0.0039	-0.0017	0.0018
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.3466	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	> 0.9999	0.0004	0.0004	0.0000	0.0004
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.3681	0.0077	0.0034	0.0043	0.0045
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.2786	0.0087	0.0038	0.0049	0.0043
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.1856	0.0151	0.0268	-0.0116	0.0080
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.9645	0.4207	0.4153	0.0054	0.1179
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.7387	0.0075	0.0062	0.0013	0.0039
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.4030	0.0012	0.0024	-0.0012	0.0014
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.6530	0.0002	0.0001	0.0001	0.0002
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.8168	0.0006	0.0005	0.0001	0.0005
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.2229	0.0010	0.0059	-0.0050	0.0038
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales	0.3466	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.6029	0.0152	0.0205	-0.0053	0.0098
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.6483	0.4035	0.3219	0.0815	0.1721
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales	0.3466	0.0000	0.0005	-0.0005	0.0005
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.9827	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.1987	0.0065	0.0210	-0.0146	0.0104
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.5035	0.0003	0.0006	-0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.0966	0.0000	0.0005	-0.0005	0.0002

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.4637	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.8569	0.0017	0.0014	0.0003	0.0014
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.4499	0.0157	0.0290	-0.0133	0.0167
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrionadaceae	0.3261	0.0042	0.0084	-0.0041	0.0039
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.2824	0.0036	0.0094	-0.0058	0.0050
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.7818	0.0152	0.0184	-0.0032	0.0111
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.4446	0.0592	0.0932	-0.0340	0.0423
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.5851	0.0093	0.0063	0.0031	0.0054
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.3696	0.0022	0.0039	-0.0017	0.0018
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.3466	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	> 0.9999	0.0004	0.0004	0.0000	0.0004
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ ;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.3686	0.0077	0.0034	0.0043	0.0045
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.2786	0.0087	0.0038	0.0049	0.0043

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_f_	0.1856	0.0151	0.0268	-0.0116	0.0080
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.4524	0.0062	0.0033	0.0030	0.0037
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.8683	0.0016	0.0018	-0.0001	0.0007
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.1454	0.0014	0.0021	-0.0007	0.0004
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.9579	0.2963	0.3009	-0.0046	0.0840
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.8275	0.1150	0.1073	0.0078	0.0345
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.7989	0.0071	0.0061	0.0010	0.0038
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.1580	0.0004	0.0001	0.0003	0.0002
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.4736	0.0012	0.0022	-0.0010	0.0014
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.0530	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_f_	0.6530	0.0002	0.0001	0.0001	0.0002
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.8168	0.0006	0.0005	0.0001	0.0005
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.2229	0.0010	0.0059	-0.0050	0.0038
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae	0.3466	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.6029	0.0152	0.0205	-0.0053	0.0098
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.6483	0.4035	0.3219	0.0815	0.1721
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae	0.3466	0.0000	0.0005	-0.0005	0.0005
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.3466	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.9827	0.0001	0.0001	0.0000	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.1987	0.0065	0.0210	-0.0146	0.0104
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.5035	0.0003	0.0006	-0.0002	0.0003
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.0966	0.0000	0.0005	-0.0005	0.0002

WT water versus WT P80 - Feces

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria	0.7490	0.0061	0.0055	0.0006	0.0018
Root;k__Bacteria;p__Bacteroidetes	0.6913	0.4096	0.4267	-0.0171	0.0413
Root;k__Bacteria;p__Cyanobacteria	0.7123	0.0011	0.0013	-0.0002	0.0005
Root;k__Bacteria;p__Deferribacteres	0.4668	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Firmicutes	0.2737	0.4978	0.4578	0.0400	0.0337
Root;k__Bacteria;p__Planctomycetes					
Root;k__Bacteria;p__Proteobacteria	0.3228	0.0790	0.1019	-0.0229	0.0215
Root;k__Bacteria;p__TM7	0.5745	0.0003	0.0004	-0.0001	0.0002
Root;k__Bacteria;p__Tenericutes	0.9225	0.0059	0.0063	-0.0004	0.0038
Root;k__Bacteria;p__Verrucomicrobia					

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria	0.7490	0.0061	0.0055	0.0006	0.0018
Root;k__Bacteria;p__Actinobacteria;c__Thermoleophilia					
Root;k__Bacteria;p__Bacteroidetes;c__Bacteroidia	0.6913	0.4096	0.4267	-0.0171	0.0413
Root;k__Bacteria;p__Bacteroidetes;c__Flavobacteriia					
Root;k__Bacteria;p__Bacteroidetes;c__Sphingobacteriia					
Root;k__Bacteria;p__Cyanobacteria;c__4C0d-2	0.5673	0.0008	0.0012	-0.0003	0.0005
Root;k__Bacteria;p__Cyanobacteria;c__Chloroplast	0.3562	0.0002	0.0001	0.0001	0.0001
Root;k__Bacteria;p__Deferribacteres;c__Deferribacteres	0.4668	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Firmicutes;c__Bacilli	0.5469	0.0987	0.1125	-0.0138	0.0218
Root;k__Bacteria;p__Firmicutes;c__Clostridia	0.4763	0.3572	0.3139	0.0433	0.0576
Root;k__Bacteria;p__Firmicutes;c__Erysipelotrichi	0.5553	0.0419	0.0314	0.0105	0.0169
Root;k__Bacteria;p__Planctomycetes;c__Planctomycetia					
Root;k__Bacteria;p__Proteobacteria;c__Alphaproteobacteria	0.2813	0.0000	0.0003	-0.0002	0.0002
Root;k__Bacteria;p__Proteobacteria;c__Betaproteobacteria	0.2562	0.0085	0.0127	-0.0042	0.0034
Root;k__Bacteria;p__Proteobacteria;c__Deltaproteobacteria	0.2690	0.0466	0.0295	0.0170	0.0142
Root;k__Bacteria;p__Proteobacteria;c__Epsilonproteobacteria	0.0784	0.0239	0.0594	-0.0355	0.0172
Root;k__Bacteria;p__Proteobacteria;c__Gammaproteobacteria	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k__Bacteria;p__TM7;c__TM7-3	0.5745	0.0003	0.0004	-0.0001	0.0002
Root;k__Bacteria;p__Tenericutes;c__Mollicutes	0.9225	0.0059	0.0063	-0.0004	0.0038
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae					

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales					
Root;k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Bifidobacteriales	0.7490	0.0061	0.0055	0.0006	0.0018
Root;k__Bacteria;p__Actinobacteria;c__Thermoleophilia;o__Solirubrobacterales					
Root;k__Bacteria;p__Bacteroidetes;c__Bacteroidia;o__Bacteroidales	0.6913	0.4096	0.4267	-0.0171	0.0413
Root;k__Bacteria;p__Bacteroidetes;c__Flavobacteriia;o__Flavobacteriales					
Root;k__Bacteria;p__Bacteroidetes;c__Sphingobacteriia;o__Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.5673	0.0008	0.0012	-0.0003	0.0005
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.3562	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	0.4668	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.5760	0.0665	0.0580	0.0085	0.0145
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.0730	0.0322	0.0545	-0.0223	0.0106
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.1800	0.0248	0.0160	0.0088	0.0059
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.6065	0.3186	0.2900	0.0286	0.0531
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.0534	0.0137	0.0078	0.0059	0.0025
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.5553	0.0419	0.0314	0.0105	0.0169
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.2924	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.1057	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.2562	0.0085	0.0127	-0.0042	0.0034
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.2690	0.0466	0.0295	0.0170	0.0142
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.0784	0.0239	0.0594	-0.0355	0.0172
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.5745	0.0003	0.0004	-0.0001	0.0002
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.9620	0.0057	0.0055	0.0002	0.0034
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.3411	0.0002	0.0008	-0.0005	0.0005
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales					

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.7490	0.0061	0.0055	0.0006	0.0018
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.2634	0.0004	0.0009	-0.0005	0.0004
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.0235	0.0381	0.0806	-0.0425	0.0147
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.0294	0.0040	0.0087	-0.0048	0.0017
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.3614	0.0178	0.0271	-0.0093	0.0095
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.7938	0.0117	0.0128	-0.0011	0.0040
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.2251	0.3348	0.2939	0.0410	0.0308
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.9697	0.0028	0.0028	0.0000	0.0008
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.5673	0.0008	0.0012	-0.0003	0.0005
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.3562	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.4668	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ _f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.5705	0.0664	0.0578	0.0086	0.0145
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.2908	0.0000	0.0002	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.0730	0.0322	0.0545	-0.0223	0.0106

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_f_	0.1800	0.0248	0.0160	0.0088	0.0059
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.1052	0.0008	0.0004	0.0004	0.0002
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.6977	0.0027	0.0023	0.0004	0.0010
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	< 0.0001	0.0029	0.0009	0.0021	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.5228	0.2520	0.2165	0.0355	0.0528
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.4550	0.0602	0.0700	-0.0098	0.0123
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.0253	0.0095	0.0036	0.0059	0.0021
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.9917	0.0042	0.0042	0.0000	0.0009
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.5027	0.0418	0.0298	0.0120	0.0170
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.0804	0.0001	0.0016	-0.0015	0.0008
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_f_	0.2924	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.1057	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.2636	0.0085	0.0127	-0.0042	0.0034
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.2690	0.0466	0.0295	0.0170	0.0142
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.0784	0.0239	0.0594	-0.0355	0.0172
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae	0.2924	0.0000	0.0000	0.0000	0.0000

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.5745	0.0003	0.0004	-0.0001	0.0002
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.9620	0.0057	0.0055	0.0002	0.0034
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.3411	0.0002	0.0008	-0.0005	0.0005
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae					

WT water versus WT P80 - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.9982	0.0003	0.0003	0.0000	0.0002
Root;k_Bacteria;p_Bacteroidetes	0.8511	0.1839	0.1654	0.0186	0.0954
Root;k_Bacteria;p_Cyanobacteria	0.2711	0.0033	0.0082	-0.0048	0.0041
Root;k_Bacteria;p_Deferribacteres	0.8835	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes	0.4473	0.4676	0.3513	0.1164	0.1446
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.5203	0.3393	0.4621	-0.1228	0.1815
Root;k_Bacteria;p_TM7	0.2089	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes	0.1034	0.0053	0.0123	-0.0070	0.0037
Root;k_Bacteria;p_Verrucomicrobia	0.0223	0.0000	0.0005	-0.0005	0.0002

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.6027	0.0002	0.0003	-0.0001	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.8953	0.1090	0.1185	-0.0095	0.0697
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.2924	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.3873	0.0022	0.0061	-0.0040	0.0043
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.7569	0.0004	0.0006	-0.0002	0.0005
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.2362	0.0165	0.0047	0.0118	0.0091
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.2478	0.4433	0.2690	0.1743	0.1383
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.2790	0.0012	0.0033	-0.0021	0.0018
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.3056	0.0008	0.0003	0.0005	0.0005
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.1884	0.0010	0.0064	-0.0054	0.0037
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.6747	0.0152	0.0194	-0.0042	0.0096
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.3615	0.4035	0.5601	-0.1567	0.1605
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.1766	0.0000	0.0003	-0.0002	0.0001
Root;k_Bacteria;p_TM7;c_TM7-3	0.8599	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.3811	0.0068	0.0102	-0.0035	0.0037
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.0607	0.0000	0.0006	-0.0006	0.0003

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.0906	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.9105	0.0002	0.0002	0.0000	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.8953	0.1090	0.1185	-0.0095	0.0697
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales	0.2924	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales	0.2924	0.0000	0.0000	0.0000	0.0000

Root;k Bacteria;p Cyanobacteria;c 4C0d-2;o YS2	0.3873	0.0022	0.0061	-0.0040	0.0043
Root;k Bacteria;p Cyanobacteria;c Chloroplast;o Streptophyta					
Root;k Bacteria;p Deferribacteres;c Deferribacteres;o Deferribacterales	0.7569	0.0004	0.0006	-0.0002	0.0005
Root;k Bacteria;p Firmicutes;c Bacilli;o					
Root;k Bacteria;p Firmicutes;c Bacilli;o Bacillales					
Root;k Bacteria;p Firmicutes;c Bacilli;o Lactobacillales	0.2392	0.0077	0.0014	0.0063	0.0049
Root;k Bacteria;p Firmicutes;c Bacilli;o Turicibacterales	0.2866	0.0087	0.0033	0.0055	0.0047
Root;k Bacteria;p Firmicutes;c Clostridia;o	0.3219	0.0151	0.0102	0.0049	0.0046
Root;k Bacteria;p Firmicutes;c Clostridia;o Clostridiales	0.2581	0.4207	0.2554	0.1652	0.1342
Root;k Bacteria;p Firmicutes;c Clostridia;o Coriobacteriales	0.0438	0.0075	0.0034	0.0042	0.0017
Root;k Bacteria;p Firmicutes;c Erysipelotrichi;o Erysipelotrichales	0.2790	0.0012	0.0033	-0.0021	0.0018
Root;k Bacteria;p Planctomycetes;c Planctomycetia;o Gemmatales					
Root;k Bacteria;p Planctomycetes;c Planctomycetia;o Pirellulales					
Root;k Bacteria;p Planctomycetes;c Planctomycetia;o Planctomycetales					
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o	0.1263	0.0002	0.0000	0.0002	0.0001
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o RF32	0.4115	0.0006	0.0002	0.0003	0.0004
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o Rhizobiales					
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o Rhodobacterales					
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o Rickettsiales					
Root;k Bacteria;p Proteobacteria;c Alphaproteobacteria;o Sphingomonadales					
Root;k Bacteria;p Proteobacteria;c Betaproteobacteria;o Burkholderiales	0.1844	0.0010	0.0064	-0.0055	0.0037
Root;k Bacteria;p Proteobacteria;c Betaproteobacteria;o Methylophilales					
Root;k Bacteria;p Proteobacteria;c Betaproteobacteria;o Rhodocyclales	0.4071	0.0001	0.0000	0.0001	0.0001
Root;k Bacteria;p Proteobacteria;c Deltaproteobacteria;o Desulfovibrionales	0.6747	0.0152	0.0194	-0.0042	0.0096
Root;k Bacteria;p Proteobacteria;c Deltaproteobacteria;o Myxococcales					
Root;k Bacteria;p Proteobacteria;c Deltaproteobacteria;o Spirobacillales					
Root;k Bacteria;p Proteobacteria;c Epsilonproteobacteria;o Campylobacterales	0.3615	0.4035	0.5601	-0.1567	0.1605
Root;k Bacteria;p Proteobacteria;c Gammaproteobacteria;o Aeromonadales					
Root;k Bacteria;p Proteobacteria;c Gammaproteobacteria;o Enterobacteriales	0.2924	0.0000	0.0002	-0.0002	0.0001
Root;k Bacteria;p Proteobacteria;c Gammaproteobacteria;o Pasteurellales	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k Bacteria;p Proteobacteria;c Gammaproteobacteria;o Pseudomonadales	0.8833	0.0000	0.0000	0.0000	0.0001
Root;k Bacteria;p Proteobacteria;c Gammaproteobacteria;o Xanthomonadales					
Root;k Bacteria;p TM7;c TM7-3;o CW040	0.8599	0.0001	0.0001	0.0000	0.0001
Root;k Bacteria;p Tenericutes;c Mollicutes;o Achleplasmatales					
Root;k Bacteria;p Tenericutes;c Mollicutes;o Anaeroplasmatales					
Root;k Bacteria;p Tenericutes;c Mollicutes;o Mycoplasmatales	0.3591	0.0065	0.0101	-0.0036	0.0037
Root;k Bacteria;p Tenericutes;c Mollicutes;o RF39	0.5803	0.0003	0.0002	0.0002	0.0003
Root;k Bacteria;p Verrucomicrobia;c Verrucomicrobiae;o Verrucomicrobiales	0.0607	0.0000	0.0006	-0.0006	0.0003

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k Bacteria;p Actinobacteria;c Actinobacteria;o Actinomycetales;f					
Root;k Bacteria;p Actinobacteria;c Actinobacteria;o Actinomycetales;f ACK-M1	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k Bacteria;p Actinobacteria;c Actinobacteria;o Actinomycetales;f Brevibacteriaceae	0.2924	0.0000	0.0001	-0.0001	0.0000

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomycetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.9105	0.0002	0.0002	0.0000	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f	0.5369	0.0017	0.0009	0.0008	0.0013
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.4224	0.0157	0.0102	0.0056	0.0065
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrionadaceae	0.7182	0.0042	0.0032	0.0010	0.0027
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.8783	0.0036	0.0039	-0.0003	0.0022
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.8238	0.0152	0.0128	0.0023	0.0101
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.5875	0.0592	0.0851	-0.0259	0.0455
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.1555	0.0093	0.0024	0.0070	0.0044
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae	0.2924	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae	0.2924	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f	0.3873	0.0022	0.0061	-0.0040	0.0043
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.7569	0.0004	0.0006	-0.0002	0.0005
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_f					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.2380	0.0077	0.0014	0.0063	0.0049
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.2866	0.0087	0.0033	0.0055	0.0047

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_ ;f_	0.3219	0.0151	0.0102	0.0049	0.0046
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.4042	0.0062	0.0027	0.0035	0.0040
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.9783	0.0016	0.0017	0.0000	0.0008
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.9052	0.0014	0.0013	0.0001	0.0007
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.1867	0.2963	0.1615	0.1348	0.0921
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.5384	0.1150	0.0883	0.0268	0.0414
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.0530	0.0071	0.0031	0.0040	0.0017
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.6290	0.0004	0.0003	0.0001	0.0003
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.2984	0.0012	0.0031	-0.0019	0.0017
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.2342	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_ ;f_	0.1263	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.4115	0.0006	0.0002	0.0003	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.1897	0.0010	0.0064	-0.0054	0.0037
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae	0.4071	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.6747	0.0152	0.0194	-0.0042	0.0096
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.3615	0.4035	0.5601	-0.1567	0.1605
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.2924	0.0000	0.0002	-0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae	0.2924	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.8833	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040;f_F16	0.8599	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales;f_Acholeplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales;f_Anaeroplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales;f_Mycoplasmataceae	0.3591	0.0065	0.0101	-0.0036	0.0037
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39;f_	0.5803	0.0003	0.0002	0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae	0.0607	0.0000	0.0006	-0.0006	0.0003

IL10^{-/-} water versus IL10^{-/-} CMC - Feces

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.0021	0.0005	0.0218	-0.0212	0.0054
Root;k_Bacteria;p_Bacteroidetes	0.4405	0.4231	0.3518	0.0713	0.0894
Root;k_Bacteria;p_Cyanobacteria	0.1558	0.0006	0.0030	-0.0024	0.0016
Root;k_Bacteria;p_Deferribacteres					
Root;k_Bacteria;p_Firmicutes	0.0246	0.5171	0.3075	0.2096	0.0816
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.6014	0.0491	0.0559	-0.0068	0.0128
Root;k_Bacteria;p_TM7	0.4273	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes	0.1097	0.0025	0.0005	0.0020	0.0012
Root;k_Bacteria;p_Verrucomicrobia	0.0001	0.0071	0.2596	-0.2525	0.0458

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.1367	0.0018	0.0130	-0.0113	0.0071
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.9558	0.3847	0.3806	0.0042	0.0737
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.5611	0.0002	0.0001	0.0001	0.0002
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.9747	0.0002	0.0002	0.0000	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres					
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.5626	0.1613	0.1987	-0.0374	0.0628
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.0900	0.2954	0.1589	0.1364	0.0740
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.2327	0.0303	0.0522	-0.0219	0.0174
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.5775	0.0002	0.0003	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.3830	0.0179	0.0284	-0.0105	0.0115
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.6530	0.0286	0.0210	0.0076	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.1866	0.0007	0.0025	-0.0017	0.0012
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.5663	0.0018	0.0001	0.0018	0.0030
Root;k_Bacteria;p_TM7;c_TM7-3	0.4273	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.0863	0.0023	0.0001	0.0022	0.0012
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.4494	0.0744	0.1439	-0.0695	0.0889

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.1363	0.0018	0.0130	-0.0113	0.0071
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.9558	0.3847	0.3806	0.0042	0.0737
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.5611	0.0002	0.0001	0.0001	0.0002
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.9747	0.0002	0.0002	0.0000	0.0001
Root;k_Bacteria;p_Derribacteres;c_Derribacteres;o_Derribacterales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.5748	0.1599	0.1963	-0.0364	0.0631
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.6261	0.0014	0.0024	-0.0010	0.0019
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.0643	0.0091	0.0021	0.0070	0.0034
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.0902	0.2796	0.1485	0.1311	0.0712
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.6278	0.0067	0.0083	-0.0017	0.0034
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.2327	0.0303	0.0522	-0.0219	0.0174
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales	0.7715	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.6304	0.0002	0.0002	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.3830	0.0179	0.0284	-0.0105	0.0115
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.6530	0.0286	0.0210	0.0076	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacteriales	0.1866	0.0007	0.0025	-0.0017	0.0012
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.5486	0.0017	0.0000	0.0017	0.0028
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales	0.9788	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.4273	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales	0.4697	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.1062	0.0022	0.0001	0.0021	0.0012
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.4494	0.0744	0.1439	-0.0695	0.0889

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.1363	0.0018	0.0130	-0.0113	0.0071
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.0201	0.0000	0.0003	-0.0002	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.1776	0.0427	0.0040	0.0388	0.0271
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrionadaceae	0.8741	0.0056	0.0066	-0.0011	0.0067
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.4275	0.0020	0.0000	0.0020	0.0025
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.6281	0.0149	0.0187	-0.0038	0.0077
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.6954	0.3187	0.3499	-0.0312	0.0779
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.7243	0.0008	0.0011	-0.0002	0.0007
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.5611	0.0002	0.0001	0.0001	0.0002
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.9747	0.0002	0.0002	0.0000	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ ;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae	0.3840	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae	0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.5733	0.1594	0.1959	-0.0365	0.0631
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.7508	0.0005	0.0004	0.0001	0.0002
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.6261	0.0014	0.0024	-0.0010	0.0019

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	f_	0.0643	0.0091	0.0021	0.0070	0.0034
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_		0.1468	0.0018	0.0006	0.0012	0.0008
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae		0.4155	0.0195	0.0553	-0.0358	0.0424
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae		0.1498	0.0008	0.0001	0.0006	0.0004
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae		0.1168	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae		0.0998	0.2038	0.0802	0.1236	0.0693
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae		0.3785	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae		0.8862	0.0020	0.0015	0.0005	0.0032
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae		0.0364	0.0518	0.0107	0.0410	0.0174
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_		0.7040	0.0039	0.0049	-0.0010	0.0026
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae		0.6227	0.0028	0.0034	-0.0007	0.0013
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae		0.3736	0.0270	0.0451	-0.0181	0.0195
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]		0.3816	0.0033	0.0071	-0.0039	0.0043
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae						
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae						
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae						
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	f_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_						
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae		0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae		0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae						
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae		0.1168	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae						
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria		0.6304	0.0002	0.0002	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae						
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae		0.3821	0.0179	0.0284	-0.0105	0.0115
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae						
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae						
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae		0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae						
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae						
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae		0.6530	0.0286	0.0210	0.0076	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_						
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae						
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_						
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacteriales;f_Helicobacteraceae		0.1866	0.0007	0.0025	-0.0017	0.0012
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_						
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae						
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae		0.5486	0.0017	0.0000	0.0017	0.0028
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae		0.9788	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae						
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae		0.5486	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae						

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.4273	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae	0.4697	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.1062	0.0022	0.0001	0.0021	0.0012
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.4494	0.0744	0.1439	-0.0695	0.0889

IL10^{-/-} water versus IL10^{-/-} CMC - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	< 0.0001	0.0000	0.0012	-0.0012	0.0002
Root;k_Bacteria;p_Bacteroidetes	0.7239	0.3125	0.3479	-0.0354	0.0977
Root;k_Bacteria;p_Cyanobacteria	0.1667	0.0058	0.0125	-0.0067	0.0045
Root;k_Bacteria;p_Deferribacteres					
Root;k_Bacteria;p_Firmicutes	0.0526	0.6295	0.4117	0.2178	0.1003
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.0080	0.0268	0.1360	-0.1092	0.0338
Root;k_Bacteria;p_TM7	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Tenericutes	0.2432	0.0054	0.0025	0.0029	0.0023
Root;k_Bacteria;p_Verrucomicrobia	0.0327	0.0199	0.0882	-0.0682	0.0279

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.5990	0.0011	0.0007	0.0004	0.0007
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.0381	0.2187	0.4062	-0.1875	0.0796
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.3574	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia	0.3491	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.0569	0.0036	0.0130	-0.0095	0.0045
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.5768	0.0006	0.0001	0.0006	0.0010
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres					
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.1692	0.0084	0.0156	-0.0071	0.0048
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.3187	0.5586	0.4114	0.1472	0.1409
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.3840	0.0069	0.0112	-0.0044	0.0048
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.3004	0.0007	0.0001	0.0006	0.0006
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.0139	0.0081	0.0250	-0.0169	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.5116	0.0100	0.0076	0.0025	0.0036
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.9662	0.0307	0.0318	-0.0011	0.0247
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.2656	0.1423	0.0003	0.1420	0.1210
Root;k_Bacteria;p_TM7;c_TM7-3	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.4988	0.0058	0.0040	0.0018	0.0026
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.0348	0.0043	0.0732	-0.0688	0.0286

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.9444	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.5688	0.0010	0.0006	0.0004	0.0007
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.0381	0.2187	0.4062	-0.1875	0.0796
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales	0.3574	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales	0.3491	0.0001	0.0000	0.0001	0.0001

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.0569	0.0036	0.0130	-0.0095	0.0045
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.5768	0.0006	0.0001	0.0006	0.0010
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.1159	0.0074	0.0152	-0.0078	0.0046
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.5764	0.0010	0.0003	0.0007	0.0012
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.1743	0.0167	0.0330	-0.0163	0.0112
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.2556	0.5323	0.3737	0.1586	0.1322
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.1829	0.0096	0.0047	0.0049	0.0035
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.3840	0.0069	0.0112	-0.0044	0.0048
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.4317	0.0005	0.0000	0.0005	0.0006
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.5288	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales	0.5770	0.0000	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.0139	0.0081	0.0250	-0.0169	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.5146	0.0100	0.0076	0.0024	0.0036
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.9662	0.0307	0.0318	-0.0011	0.0247
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales	0.2648	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.2657	0.1418	0.0000	0.1418	0.1210
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales	0.0348	0.0000	0.0003	-0.0003	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.4650	0.0003	0.0000	0.0003	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales	0.7935	0.0015	0.0020	-0.0005	0.0020
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.3409	0.0018	0.0000	0.0018	0.0018
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.7415	0.0025	0.0019	0.0006	0.0018
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.0348	0.0043	0.0732	-0.0688	0.0286

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae	0.1394	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.5688	0.0010	0.0006	0.0004	0.0007
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.4899	0.0002	0.0000	0.0002	0.0003
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.2526	0.0307	0.0146	0.0161	0.0133
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyromonadaceae	0.8416	0.0075	0.0061	0.0014	0.0070
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.7936	0.0022	0.0027	-0.0006	0.0021
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.2250	0.0360	0.0597	-0.0237	0.0184
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.0253	0.1321	0.3105	-0.1783	0.0690
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.8258	0.0100	0.0127	-0.0027	0.0119
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae	0.3574	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.0569	0.0036	0.0130	-0.0095	0.0045
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.5768	0.0006	0.0001	0.0006	0.0010
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_;					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.1159	0.0074	0.0152	-0.0078	0.0046
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.5764	0.0010	0.0003	0.0007	0.0012

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_;	0.1743	0.0167	0.0330	-0.0163	0.0112
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.1643	0.0209	0.0067	0.0142	0.0095
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.1388	0.0027	0.0493	-0.0466	0.0292
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.8298	0.0019	0.0017	0.0002	0.0009
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.2375	0.3243	0.2041	0.1202	0.0962
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae	0.4121	0.0003	0.0000	0.0003	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.0994	0.0002	0.0027	-0.0025	0.0014
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.1684	0.1820	0.1093	0.0727	0.0493
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.1821	0.0092	0.0042	0.0050	0.0035
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.8509	0.0004	0.0005	0.0000	0.0002
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.4926	0.0064	0.0038	0.0026	0.0037
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.0364	0.0005	0.0074	-0.0070	0.0029
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_;	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.4317	0.0005	0.0000	0.0005	0.0006
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.5288	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae	0.5770	0.0000	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.0136	0.0080	0.0249	-0.0169	0.0058
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae	0.5288	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae	0.1394	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.5146	0.0100	0.0076	0.0024	0.0036
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.9662	0.0307	0.0318	-0.0011	0.0247
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_	0.2648	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.2657	0.1418	0.0000	0.1418	0.1210
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae	0.0348	0.0000	0.0003	-0.0003	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.4650	0.0003	0.0000	0.0003	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.5288	0.0000	0.0000	0.0000	0.0000
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae	0.7935	0.0015	0.0020	-0.0005	0.0020
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.3409	0.0018	0.0000	0.0018	0.0018
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.7415	0.0025	0.0019	0.0006	0.0018
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.0348	0.0043	0.0732	-0.0688	0.0286

IL10^{-/-} water versus IL10^{-/-} P80 - Feces

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.3135	0.0005	0.0000	0.0005	0.0005
Root;k_Bacteria;p_Bacteroidetes	0.8754	0.4231	0.4348	-0.0117	0.0735
Root;k_Bacteria;p_Cyanobacteria	0.3219	0.0006	0.0008	-0.0002	0.0002
Root;k_Bacteria;p_Deferribacteres					
Root;k_Bacteria;p_Firmicutes	0.3710	0.5171	0.4522	0.0649	0.0700
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.0973	0.0491	0.0277	0.0214	0.0120
Root;k_Bacteria;p_TM7	0.3724	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes	0.6162	0.0025	0.0018	0.0007	0.0013
Root;k_Bacteria;p_Verrucomicrobia	0.0176	0.0071	0.0826	-0.0755	0.0278

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.4649	0.0018	0.0044	-0.0026	0.0035
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.1648	0.3847	0.5016	-0.1169	0.0794
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.1172	0.0002	0.0026	-0.0024	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.1391	0.0002	0.0005	-0.0002	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres					
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.0333	0.1613	0.0789	0.0825	0.0347
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.9844	0.2954	0.2939	0.0014	0.0719
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.5150	0.0303	0.0217	0.0086	0.0129
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.0049	0.0002	0.0007	-0.0005	0.0002
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.7782	0.0179	0.0156	0.0024	0.0082
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.0533	0.0286	0.0027	0.0259	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.0455	0.0007	0.0132	-0.0124	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.6277	0.0018	0.0005	0.0013	0.0027
Root;k_Bacteria;p_TM7;c_TM7-3	0.3724	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.9249	0.0023	0.0024	-0.0001	0.0013
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.8590	0.0744	0.0614	0.0130	0.0719

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.4631	0.0018	0.0044	-0.0027	0.0035
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.1648	0.3847	0.5016	-0.1169	0.0794
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.1172	0.0002	0.0026	-0.0024	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.1391	0.0002	0.0005	-0.0002	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales	0.8144	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.0278	0.1599	0.0735	0.0864	0.0349
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.2013	0.0014	0.0053	-0.0039	0.0029
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.1778	0.0091	0.0189	-0.0098	0.0069
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.9190	0.2796	0.2725	0.0070	0.0679
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.0479	0.0067	0.0024	0.0042	0.0019
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.5150	0.0303	0.0217	0.0086	0.0129
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.1648	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales	0.7600	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.0740	0.0002	0.0005	-0.0004	0.0002
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.7782	0.0179	0.0156	0.0024	0.0082
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.0533	0.0286	0.0027	0.0259	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.0455	0.0007	0.0132	-0.0124	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.6347	0.0017	0.0005	0.0012	0.0025
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales	0.5000	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.3724	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales	0.1648	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales	0.0791	0.0001	0.0017	-0.0016	0.0008
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.2017	0.0022	0.0007	0.0015	0.0011
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.8590	0.0744	0.0614	0.0130	0.0719

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.4631	0.0018	0.0044	-0.0027	0.0035
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.0102	0.0427	0.1807	-0.1379	0.0460
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.1364	0.0056	0.0193	-0.0138	0.0087
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.0696	0.0020	0.0093	-0.0073	0.0037
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.1141	0.0149	0.0486	-0.0337	0.0199
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.3087	0.3187	0.2416	0.0770	0.0727
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.4219	0.0008	0.0021	-0.0012	0.0015
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.1172	0.0002	0.0026	-0.0024	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.1391	0.0002	0.0005	-0.0002	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ ;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae	0.1648	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae	0.3283	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae	0.1608	0.0000	0.0003	-0.0002	0.0002
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.0279	0.1594	0.0732	0.0862	0.0348
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.0174	0.0005	0.0001	0.0004	0.0002
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.2013	0.0014	0.0053	-0.0039	0.0029

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_f_	0.1778	0.0091	0.0189	-0.0098	0.0069
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.4738	0.0018	0.0025	-0.0007	0.0010
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.7667	0.0195	0.0114	0.0081	0.0266
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.1526	0.0008	0.0002	0.0005	0.0004
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.8991	0.2038	0.1954	0.0084	0.0650
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae	0.3227	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.2069	0.0020	0.0149	-0.0129	0.0097
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.8451	0.0518	0.0481	0.0037	0.0183
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.1807	0.0039	0.0015	0.0024	0.0017
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.0337	0.0028	0.0009	0.0018	0.0008
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.2129	0.0270	0.0099	0.0171	0.0131
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.1488	0.0033	0.0118	-0.0085	0.0055
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_f_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.1648	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae	0.1648	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.0740	0.0002	0.0005	-0.0004	0.0002
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.7789	0.0179	0.0156	0.0024	0.0082
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.0533	0.0286	0.0027	0.0259	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacteriales;f_Helicobacteraceae	0.0455	0.0007	0.0132	-0.0124	0.0056
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.6347	0.0017	0.0005	0.0012	0.0025
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae	0.5000	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae	0.5000	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.3724	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae	0.1648	0.0000	0.0000	0.0000	0.0000
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae	0.0791	0.0001	0.0017	-0.0016	0.0008
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.2017	0.0022	0.0007	0.0015	0.0011
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.8590	0.0744	0.0614	0.0130	0.0719

IL10^{-/-} water versus IL10^{-/-} P80 - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.0196	0.0000	0.0014	-0.0014	0.0005
Root;k_Bacteria;p_Bacteroidetes	0.2122	0.3125	0.2121	0.1004	0.0762
Root;k_Bacteria;p_Cyanobacteria	0.0056	0.0058	0.0005	0.0053	0.0016
Root;k_Bacteria;p_Deferribacteres					
Root;k_Bacteria;p_Firmicutes	0.3653	0.6295	0.5368	0.0927	0.0985
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.0143	0.0268	0.2183	-0.1915	0.0669
Root;k_Bacteria;p_TM7	0.9546	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes	0.4148	0.0054	0.0033	0.0021	0.0025
Root;k_Bacteria;p_Verrucomicrobia	0.6816	0.0199	0.0275	-0.0076	0.0181

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.4408	0.0011	0.0005	0.0005	0.0007
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.3214	0.2187	0.2776	-0.0588	0.0569
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.3010	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia	0.2927	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.6463	0.0036	0.0046	-0.0010	0.0022
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.5016	0.0006	0.0000	0.0006	0.0009
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres					
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.0867	0.0084	0.0134	-0.0050	0.0027
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.4581	0.5586	0.4675	0.0911	0.1189
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.4365	0.0069	0.0122	-0.0053	0.0066
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.5559	0.0007	0.0012	-0.0004	0.0007
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.2404	0.0081	0.0147	-0.0067	0.0054
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.7367	0.0100	0.0118	-0.0018	0.0053
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.5802	0.0307	0.0527	-0.0220	0.0388
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.5951	0.1423	0.0764	0.0659	0.1208
Root;k_Bacteria;p_TM7;c_TM7-3	0.9546	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.1193	0.0058	0.0020	0.0038	0.0023
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	< 0.0001	0.0043	0.0654	-0.0610	0.0094

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.5840	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.3696	0.0010	0.0004	0.0006	0.0006
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.3214	0.2187	0.2776	-0.0588	0.0569
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales	0.3010	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales	0.2927	0.0001	0.0000	0.0001	0.0001

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.6463	0.0036	0.0046	-0.0010	0.0022
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.5016	0.0006	0.0000	0.0006	0.0009
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.0405	0.0074	0.0130	-0.0056	0.0024
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.5736	0.0010	0.0004	0.0006	0.0011
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.7214	0.0167	0.0194	-0.0027	0.0074
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.4508	0.5323	0.4442	0.0881	0.1131
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.0842	0.0096	0.0039	0.0057	0.0030
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.4365	0.0069	0.0122	-0.0053	0.0066
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.2086	0.0000	0.0002	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.5078	0.0005	0.0010	-0.0005	0.0007
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.4783	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.2404	0.0081	0.0147	-0.0067	0.0054
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.7340	0.0100	0.0118	-0.0019	0.0053
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.5802	0.0307	0.0527	-0.0220	0.0388
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales	0.2107	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.5970	0.1418	0.0763	0.0655	0.1207
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales	0.1902	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.4725	0.0003	0.0000	0.0003	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.9546	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales	0.6933	0.0015	0.0008	0.0007	0.0017
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.2846	0.0018	0.0000	0.0018	0.0016
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.3816	0.0025	0.0012	0.0013	0.0015
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	< 0.0001	0.0043	0.0654	-0.0610	0.0094

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_	0.4783	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1	0.1902	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f__					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.3696	0.0010	0.0004	0.0006	0.0006
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f__	0.4372	0.0002	0.0000	0.0002	0.0003
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.5120	0.0307	0.0402	-0.0095	0.0141
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyromonadaceae	0.9460	0.0075	0.0080	-0.0005	0.0067
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.0135	0.0022	0.0137	-0.0115	0.0040
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.3022	0.0360	0.0237	0.0123	0.0114
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.3456	0.1321	0.1786	-0.0465	0.0473
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.7573	0.0100	0.0134	-0.0034	0.0108
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae	0.3010	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f__					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae	0.4783	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f__	0.6463	0.0036	0.0046	-0.0010	0.0022
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f__	0.5016	0.0006	0.0000	0.0006	0.0009
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o__;f__					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f__					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f__					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.0405	0.0074	0.0130	-0.0056	0.0024
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.5736	0.0010	0.0004	0.0006	0.0011

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_;	0.7214	0.0167	0.0194	-0.0027	0.0074
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.1323	0.0209	0.0068	0.0141	0.0087
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.1593	0.0027	0.0658	-0.0631	0.0421
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.3827	0.0019	0.0013	0.0006	0.0007
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.2291	0.3243	0.2220	0.1024	0.0808
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae	0.3563	0.0003	0.0000	0.0003	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.1571	0.0002	0.0028	-0.0026	0.0017
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.4567	0.1820	0.1455	0.0365	0.0474
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.0911	0.0092	0.0036	0.0056	0.0030
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.5081	0.0004	0.0003	0.0002	0.0002
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.3671	0.0064	0.0033	0.0031	0.0033
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.1531	0.0005	0.0088	-0.0084	0.0055
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_;	0.2086	0.0000	0.0002	-0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.5078	0.0005	0.0010	-0.0005	0.0007
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.4783	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.2372	0.0080	0.0147	-0.0067	0.0054
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae	0.4783	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.7340	0.0100	0.0118	-0.0019	0.0053
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae	0.4783	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.5802	0.0307	0.0527	-0.0220	0.0388
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_	0.2107	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.5970	0.1418	0.0763	0.0655	0.1207
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae	0.1902	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.4725	0.0003	0.0000	0.0003	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.9546	0.0000	0.0000	0.0000	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae	0.6933	0.0015	0.0008	0.0007	0.0017
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.2846	0.0018	0.0000	0.0018	0.0016
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.3816	0.0025	0.0012	0.0013	0.0015
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	< 0.0001	0.0043	0.0654	-0.0610	0.0094

TLR5^{-/-} water versus TLR5^{-/-} CMC - Feces

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.0325	0.0036	0.0227	-0.0192	0.0072
Root;k_Bacteria;p_Bacteroidetes	0.0489	0.4535	0.5943	-0.1408	0.0592
Root;k_Bacteria;p_Cyanobacteria	0.5397	0.0031	0.0076	-0.0045	0.0069
Root;k_Bacteria;p_Deferribacteres	0.2420	0.0004	0.0001	0.0003	0.0003
Root;k_Bacteria;p_Firmicutes	0.0653	0.4094	0.2730	0.1364	0.0625
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.5621	0.1193	0.0994	0.0199	0.0327
Root;k_Bacteria;p_TM7	0.3966	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes	0.0502	0.0064	0.0028	0.0036	0.0015
Root;k_Bacteria;p_Verrucomicrobia	0.0413	0.0041	0.0000	0.0041	0.0016

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.0325	0.0036	0.0227	-0.0192	0.0072
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia	< 0.0001	0.4535	0.0000	0.4535	0.0365
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	< 0.0001	0.0031	0.5943	-0.5912	0.0465
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.1504	0.0004	0.0000	0.0004	0.0003
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia	< 0.0001	0.4094	0.0000	0.4094	0.0487
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.3155	0.0000	0.0075	-0.0075	0.0069
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.0038	0.1193	0.0001	0.1193	0.0280
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.4808	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.0991	0.0064	0.0366	-0.0302	0.0159
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.0007	0.0041	0.1763	-0.1722	0.0296
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.0321	0.0482	0.0157	0.0325	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.5349	0.0204	0.0308	-0.0104	0.0160
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria					
Root;k_Bacteria;p_TM7;c_TM7-3	0.0095	0.0003	0.0001	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.0644	0.0073	0.0028	0.0045	0.0020
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae					

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.0449	0.0056	0.0227	-0.0171	0.0070
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.0078	0.4175	0.5943	-0.1769	0.0480
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.3773	0.0010	0.0075	-0.0065	0.0069
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.2034	0.0003	0.0001	0.0002	0.0001
Root;k_Bacteria;p_Derribacteres;c_Derribacteres;o_Derribacterales	0.8334	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales	0.0681	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.1226	0.0668	0.0364	0.0303	0.0173
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.0068	0.0283	0.0000	0.0283	0.0075
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.0032	0.0262	0.0068	0.0194	0.0044
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.0045	0.3161	0.1658	0.1503	0.0366
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	< 0.0001	0.0157	0.0037	0.0120	0.0011
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.4101	0.0371	0.0601	-0.0231	0.0263
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.7475	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.0133	0.0092	0.0527	-0.0435	0.0132
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.0321	0.0482	0.0157	0.0325	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.5349	0.0204	0.0308	-0.0104	0.0160
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.0095	0.0003	0.0001	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.0105	0.0070	0.0008	0.0062	0.0018
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.1096	0.0003	0.0020	-0.0018	0.0010
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales					

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomycetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_	0.4071	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.0447	0.0056	0.0226	-0.0170	0.0070
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.4102	0.0003	0.0010	-0.0007	0.0007
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.3215	0.0410	0.0597	-0.0186	0.0175
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.2966	0.0032	0.0016	0.0016	0.0014
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.0031	0.0202	0.0029	0.0173	0.0039
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.0518	0.0121	0.0036	0.0084	0.0036
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.0012	0.3380	0.5233	-0.1853	0.0356
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.5630	0.0027	0.0023	0.0004	0.0007
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.3773	0.0010	0.0075	-0.0065	0.0069
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.2034	0.0003	0.0001	0.0002	0.0001
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.8334	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_;					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae	0.1930	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.1230	0.0667	0.0364	0.0303	0.0173
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.8917	0.0000	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.0068	0.0283	0.0000	0.0283	0.0075

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_ ;f_	0.0032	0.0262	0.0068	0.0194	0.0044
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.0500	0.0007	0.0003	0.0003	0.0001
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.0926	0.0027	0.0012	0.0016	0.0008
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	< 0.0001	0.0029	0.0006	0.0023	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.0097	0.2529	0.1305	0.1224	0.0347
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.0550	0.0569	0.0332	0.0237	0.0103
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	< 0.0001	0.0112	0.0024	0.0088	0.0007
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.0043	0.0045	0.0013	0.0032	0.0008
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.4090	0.0370	0.0600	-0.0231	0.0263
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.8855	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_ ;f_	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.7475	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria	0.4071	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.0133	0.0092	0.0527	-0.0435	0.0132
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.0321	0.0482	0.0157	0.0325	0.0122
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.5349	0.0204	0.0308	-0.0104	0.0160
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040;f_F16	0.0095	0.0003	0.0001	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales;f_Acholeplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales;f_Anaeroplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales;f_Mycoplasmataceae	0.0105	0.0070	0.0008	0.0062	0.0018
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39;f__	0.1096	0.0003	0.0020	-0.0018	0.0010
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae					

TLR5^{-/-} water versus TLR5^{-/-} CMC - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.2112	0.0004	0.0001	0.0003	0.0002
Root;k_Bacteria;p_Bacteroidetes	0.8093	0.2255	0.2556	-0.0301	0.1194
Root;k_Bacteria;p_Cyanobacteria	0.5536	0.0025	0.0041	-0.0017	0.0026
Root;k_Bacteria;p_Deferribacteres	0.1826	0.0023	0.0003	0.0020	0.0013
Root;k_Bacteria;p_Firmicutes	0.4333	0.3385	0.2318	0.1067	0.1271
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.6948	0.4118	0.5011	-0.0893	0.2168
Root;k_Bacteria;p_TM7	0.9010	0.0001	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes	0.7093	0.0103	0.0069	0.0034	0.0088
Root;k_Bacteria;p_Verrucomicrobia	0.2542	0.0086	0.0001	0.0086	0.0068

Class level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.2112	0.0004	0.0001	0.0003	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.8089	0.2254	0.2556	-0.0302	0.1194
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.5536	0.0025	0.0041	-0.0017	0.0026
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.1826	0.0023	0.0003	0.0020	0.0013
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.2148	0.0173	0.0033	0.0140	0.0101
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.5290	0.3132	0.2267	0.0865	0.1295
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.1505	0.0080	0.0018	0.0063	0.0038
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.2464	0.0000	0.0005	-0.0005	0.0004
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.8569	0.0257	0.0232	0.0025	0.0133
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.0183	0.0449	0.0140	0.0310	0.0096
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.6125	0.3404	0.4634	-0.1230	0.2303
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.0129	0.0008	0.0000	0.0007	0.0002
Root;k_Bacteria;p_TM7;c_TM7-3	0.9010	0.0001	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.7093	0.0103	0.0069	0.0034	0.0088
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.2542	0.0086	0.0001	0.0086	0.0068

Order level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales	0.3559	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.1059	0.0004	0.0001	0.0004	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.8089	0.2254	0.2556	-0.0302	0.1194
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.5536	0.0025	0.0041	-0.0017	0.0026
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	0.1826	0.0023	0.0003	0.0020	0.0013
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.2698	0.0157	0.0033	0.0123	0.0101
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.0081	0.0016	0.0000	0.0016	0.0004
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.1885	0.0127	0.0054	0.0074	0.0050
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.5420	0.2960	0.2160	0.0800	0.1238
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.7977	0.0045	0.0054	-0.0008	0.0032
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.1505	0.0080	0.0018	0.0063	0.0038
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.2344	0.0000	0.0004	-0.0004	0.0003
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.8569	0.0257	0.0232	0.0025	0.0133
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.0183	0.0449	0.0140	0.0310	0.0096
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.6125	0.3404	0.4634	-0.1230	0.2303
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.1539	0.0005	0.0000	0.0005	0.0003
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.3093	0.0002	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.9010	0.0001	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.5795	0.0089	0.0042	0.0047	0.0081
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.3395	0.0014	0.0027	-0.0013	0.0013
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.2542	0.0086	0.0001	0.0086	0.0068

Family level	P value	Mean water-treated	Mean CMC-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1	0.3559	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.1059	0.0004	0.0001	0.0004	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.2384	0.0108	0.0006	0.0101	0.0077
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.5428	0.0619	0.0351	0.0269	0.0416
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.0810	0.0093	0.0012	0.0082	0.0039
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.4652	0.0087	0.0050	0.0037	0.0048
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.3223	0.0066	0.0028	0.0039	0.0036
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.3805	0.1228	0.2071	-0.0843	0.0891
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.4886	0.0053	0.0038	0.0014	0.0019
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.5536	0.0025	0.0041	-0.0017	0.0026
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.1826	0.0023	0.0003	0.0020	0.0013
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ ;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae	0.8848	0.0001	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.2710	0.0156	0.0033	0.0123	0.0101
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.0081	0.0016	0.0000	0.0016	0.0004

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_ ;f_	0.1885	0.0127	0.0054	0.0074	0.0050
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.5080	0.0033	0.0014	0.0019	0.0028
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.6910	0.0023	0.0018	0.0004	0.0010
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.4202	0.0007	0.0012	-0.0005	0.0006
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.4309	0.1980	0.1312	0.0667	0.0791
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.8055	0.0917	0.0803	0.0114	0.0442
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.8314	0.0044	0.0050	-0.0007	0.0031
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.6239	0.0002	0.0003	-0.0002	0.0003
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.1348	0.0056	0.0018	0.0038	0.0022
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.2982	0.0025	0.0000	0.0025	0.0022
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_ ;f_	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.2344	0.0000	0.0004	-0.0004	0.0003
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.8552	0.0257	0.0231	0.0025	0.0134
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.0183	0.0449	0.0140	0.0310	0.0096
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.6125	0.3404	0.4634	-0.1230	0.2303
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.1539	0.0005	0.0000	0.0005	0.0003
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.3093	0.0002	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae	0.3559	0.0001	0.0000	0.0001	0.0001

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.9010	0.0001	0.0000	0.0000	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.5795	0.0089	0.0042	0.0047	0.0081
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.3395	0.0014	0.0027	-0.0013	0.0013
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.2542	0.0086	0.0001	0.0086	0.0068

TLR5^{-/-} water versus TLR5^{-/-} P80 - Feces

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.1015	0.0036	0.0183	-0.0147	0.0073
Root;k_Bacteria;p_Bacteroidetes	0.0937	0.4535	0.5745	-0.1210	0.0585
Root;k_Bacteria;p_Cyanobacteria	0.0344	0.0031	0.0009	0.0022	0.0008
Root;k_Bacteria;p_Deferribacteres	0.3627	0.0004	0.0001	0.0004	0.0004
Root;k_Bacteria;p_Firmicutes	0.1481	0.4094	0.2880	0.1214	0.0711
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.9333	0.1193	0.1159	0.0034	0.0385
Root;k_Bacteria;p_TM7	0.2471	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Tenericutes	0.0246	0.0064	0.0013	0.0051	0.0016
Root;k_Bacteria;p_Verrucomicrobia	0.2505	0.0041	0.0010	0.0030	0.0023

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.1015	0.0036	0.0183	-0.0147	0.0073
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia	0.0003	0.4535	0.0000	0.4535	0.0492
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	< 0.0001	0.0031	0.5745	-0.5714	0.0317
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.2844	0.0004	0.0000	0.0004	0.0004
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia	0.0015	0.4094	0.0000	0.4094	0.0656
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.0251	0.0000	0.0008	-0.0008	0.0003
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast	0.0252	0.1193	0.0001	0.1193	0.0378
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.5015	0.0002	0.0001	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.0740	0.0064	0.0736	-0.0672	0.0298
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.0002	0.0041	0.0861	-0.0820	0.0086
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.0685	0.0482	0.0101	0.0381	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.1375	0.0204	0.0481	-0.0277	0.0157
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria					
Root;k_Bacteria;p_TM7;c_TM7-3	0.0043	0.0003	0.0000	0.0003	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.0577	0.0073	0.0013	0.0059	0.0024
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.2445	0.0000	0.0010	-0.0010	0.0008

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.1302	0.0056	0.0183	-0.0126	0.0070
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.0068	0.4175	0.5745	-0.1570	0.0354
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.7096	0.0010	0.0008	0.0001	0.0004
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta	0.2902	0.0003	0.0001	0.0002	0.0002
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	0.8746	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales	0.2856	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.9079	0.0668	0.0637	0.0031	0.0253
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.2058	0.0283	0.0098	0.0185	0.0127
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.0017	0.0262	0.0023	0.0239	0.0039
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.0009	0.3161	0.0797	0.2364	0.0333
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.0013	0.0157	0.0041	0.0116	0.0018
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.0211	0.0371	0.1283	-0.0912	0.0275
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32	0.8630	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.0003	0.0092	0.0577	-0.0485	0.0054
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.0685	0.0482	0.0101	0.0381	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.1375	0.0204	0.0481	-0.0277	0.0157
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales					
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.0043	0.0003	0.0000	0.0003	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.0505	0.0070	0.0008	0.0061	0.0024
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.4904	0.0003	0.0005	-0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.2445	0.0000	0.0010	-0.0010	0.0008

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.1302	0.0056	0.0183	-0.0126	0.0070
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.4963	0.0003	0.0007	-0.0004	0.0005
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.4404	0.0410	0.0525	-0.0115	0.0137
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrionadaceae	0.1008	0.0032	0.0089	-0.0057	0.0028
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.0137	0.0202	0.0009	0.0192	0.0052
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.0980	0.0121	0.0024	0.0096	0.0047
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.0153	0.3380	0.5064	-0.1685	0.0466
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.8902	0.0027	0.0026	0.0001	0.0008
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.7096	0.0010	0.0008	0.0001	0.0004
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_	0.2902	0.0003	0.0001	0.0002	0.0002
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.8746	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_ ;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae	0.2856	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae	0.2856	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.8952	0.0667	0.0632	0.0035	0.0251
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.2620	0.0000	0.0004	-0.0003	0.0003
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.2058	0.0283	0.0098	0.0185	0.0127

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_; f_	0.0017	0.0262	0.0023	0.0239	0.0039
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.3867	0.0007	0.0004	0.0002	0.0002
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.1222	0.0027	0.0008	0.0019	0.0010
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.0002	0.0029	0.0001	0.0029	0.0003
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae	0.2856	0.0000	0.0001	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.0031	0.2529	0.0599	0.1930	0.0361
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae	0.2856	0.0000	0.0002	-0.0002	0.0002
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.0027	0.0569	0.0182	0.0387	0.0070
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.0007	0.0112	0.0021	0.0091	0.0012
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.0642	0.0045	0.0020	0.0025	0.0011
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.0216	0.0370	0.1264	-0.0894	0.0272
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.0780	0.0001	0.0019	-0.0018	0.0008
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_;					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_	0.8630	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.0003	0.0092	0.0577	-0.0485	0.0054
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.0685	0.0482	0.0101	0.0381	0.0165
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.1375	0.0204	0.0481	-0.0277	0.0157
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae					

Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040;f_F16	0.0043	0.0003	0.0000	0.0003	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales;f_Acholeplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales;f_Anaeroplasmataceae					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales;f_Mycoplasmataceae	0.0505	0.0070	0.0008	0.0061	0.0024
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39;f__	0.4904	0.0003	0.0005	-0.0002	0.0003
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae	0.2445	0.0000	0.0010	-0.0010	0.0008

TLR5^{-/-} water versus TLR5^{-/-} P80 - Mucosa Associated Bacteria

Phyla level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria	0.3554	0.0004	0.0002	0.0002	0.0002
Root;k_Bacteria;p_Bacteroidetes	0.6707	0.2255	0.2699	-0.0445	0.0995
Root;k_Bacteria;p_Cyanobacteria	0.2057	0.0025	0.0005	0.0020	0.0014
Root;k_Bacteria;p_Deferribacteres	0.9662	0.0023	0.0023	0.0001	0.0018
Root;k_Bacteria;p_Firmicutes	0.6680	0.3385	0.2883	0.0502	0.1114
Root;k_Bacteria;p_Planctomycetes					
Root;k_Bacteria;p_Proteobacteria	0.9149	0.4118	0.4312	-0.0194	0.1741
Root;k_Bacteria;p_TM7	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes	0.7427	0.0103	0.0074	0.0030	0.0086
Root;k_Bacteria;p_Verrucomicrobia	0.2651	0.0086	0.0003	0.0084	0.0068

Class level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria	0.3554	0.0004	0.0002	0.0002	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia	0.6704	0.2254	0.2699	-0.0445	0.0995
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2	0.2057	0.0025	0.0005	0.0020	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres	0.9662	0.0023	0.0023	0.0001	0.0018
Root;k_Bacteria;p_Firmicutes;c_Bacilli	0.1651	0.0173	0.0015	0.0158	0.0100
Root;k_Bacteria;p_Firmicutes;c_Clostridia	0.7779	0.3132	0.2794	0.0338	0.1147
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi	0.8908	0.0080	0.0075	0.0006	0.0039
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria	0.9184	0.0257	0.0271	-0.0014	0.0130
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria	0.4093	0.0449	0.0329	0.0120	0.0136
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria	0.9940	0.3404	0.3391	0.0013	0.1658
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria	0.3656	0.0008	0.0321	-0.0313	0.0320
Root;k_Bacteria;p_TM7;c_TM7-3	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes	0.7427	0.0103	0.0074	0.0030	0.0086
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae	0.2651	0.0086	0.0003	0.0084	0.0068

Order level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales	0.3554	0.0004	0.0002	0.0002	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacteriales					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales	0.6704	0.2254	0.2699	-0.0445	0.0995
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales					

Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2	0.2057	0.0025	0.0005	0.0020	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales	0.9662	0.0023	0.0023	0.0001	0.0018
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales	0.2064	0.0157	0.0014	0.0143	0.0101
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales	0.0110	0.0016	0.0001	0.0015	0.0004
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_	0.6736	0.0127	0.0107	0.0020	0.0045
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales	0.7821	0.2960	0.2642	0.0318	0.1099
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales	0.9866	0.0045	0.0045	0.0001	0.0029
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales	0.8908	0.0080	0.0075	0.0006	0.0039
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales	0.9184	0.0257	0.0271	-0.0014	0.0130
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales	0.4093	0.0449	0.0329	0.0120	0.0136
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales	0.9940	0.3404	0.3391	0.0013	0.1658
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales	0.3614	0.0005	0.0320	-0.0315	0.0319
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales	0.1710	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales	0.8001	0.0001	0.0001	0.0000	0.0001
Root;k_Bacteria;p_TM7;c_TM7-3;o_CW040	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Acholeplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Anaeroplasmatales					
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_Mycoplasmatales	0.7562	0.0089	0.0063	0.0026	0.0081
Root;k_Bacteria;p_Tenericutes;c_Mollicutes;o_RF39	0.7225	0.0014	0.0011	0.0003	0.0009
Root;k_Bacteria;p_Verrucomicrobia;c_Verrucomicrobiae;o_Verrucomicrobiales	0.2651	0.0086	0.0003	0.0084	0.0068

Family level	P value	Mean water-treated	Mean P80-treated	Difference	SE of difference
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_ACK-M1					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae					

Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Frankiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Kineosporiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Streptomyetaceae					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_					
Root;k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae	0.3554	0.0004	0.0002	0.0002	0.0002
Root;k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_Solirubrobacteraceae					
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_	0.2477	0.0108	0.0009	0.0099	0.0077
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae	0.5517	0.0619	0.0360	0.0259	0.0411
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyrimonadaceae	0.4568	0.0093	0.0060	0.0034	0.0042
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae	0.3811	0.0087	0.0042	0.0045	0.0047
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae	0.1929	0.0066	0.0018	0.0048	0.0033
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7	0.2591	0.1228	0.2166	-0.0938	0.0752
Root;k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_[Odoribacteraceae]	0.6495	0.0053	0.0045	0.0008	0.0016
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Cryomorphaceae	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Chitinophagaceae					
Root;k_Bacteria;p_Bacteroidetes;c_Sphingobacteriia;o_Sphingobacteriales;f_Flexibacteraceae					
Root;k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_YS2;f_	0.2057	0.0025	0.0005	0.0020	0.0014
Root;k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_					
Root;k_Bacteria;p_Deferribacteres;c_Deferribacteres;o_Deferribacterales;f_Deferribacteraceae	0.9662	0.0023	0.0023	0.0001	0.0018
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_;;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Planococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Thermoactinomycetaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae	0.8312	0.0001	0.0000	0.0000	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Carnobacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae	0.2074	0.0156	0.0013	0.0142	0.0101
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae					
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae	0.0110	0.0016	0.0001	0.0015	0.0004

Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_ ;f_	0.6736	0.0127	0.0107	0.0020	0.0045
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_	0.4657	0.0033	0.0012	0.0021	0.0027
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae	0.3670	0.0023	0.0033	-0.0011	0.0011
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Dehalobacteriaceae	0.0735	0.0007	0.0017	-0.0010	0.0005
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Eubacteriaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae	0.6958	0.1980	0.1681	0.0298	0.0727
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae					
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae	0.9595	0.0917	0.0898	0.0019	0.0365
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_	0.9543	0.0044	0.0042	0.0002	0.0028
Root;k_Bacteria;p_Firmicutes;c_Clostridia;o_Coriobacteriales;f_Coriobacteriaceae	0.4055	0.0002	0.0003	-0.0001	0.0001
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae	0.7028	0.0056	0.0065	-0.0009	0.0024
Root;k_Bacteria;p_Firmicutes;c_Erysipelotrichi;o_Erysipelotrichales;f_[Coprobacillaceae]	0.5113	0.0025	0.0009	0.0015	0.0022
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae					
Root;k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_ ;f_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_RF32;f_					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria					
Root;k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae	0.3559	0.0000	0.0000	0.0000	0.0000
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae	0.9184	0.0257	0.0271	-0.0014	0.0130
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae					
Root;k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfovibrionales;f_Desulfovibrionaceae	0.4093	0.0449	0.0329	0.0120	0.0136
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Nannocystaceae					
Root;k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Spirobacillales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Epsilonproteobacteria;o_Campylobacterales;f_Helicobacteraceae	0.9940	0.3404	0.3391	0.0013	0.1658
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae	0.3614	0.0005	0.0320	-0.0315	0.0319
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pasteurellales;f_Pasteurellaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae	0.1710	0.0002	0.0000	0.0002	0.0001
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae					
Root;k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae	0.8001	0.0001	0.0001	0.0000	0.0001

Root;k__Bacteria;p__TM7;c__TM7-3;o__CW040;f__F16	0.3559	0.0001	0.0000	0.0001	0.0001
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Acholeplasmatales;f__Acholeplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Anaeroplasmatales;f__Anaeroplasmataceae					
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__Mycoplasmatales;f__Mycoplasmataceae	0.7562	0.0089	0.0063	0.0026	0.0081
Root;k__Bacteria;p__Tenericutes;c__Mollicutes;o__RF39;f__	0.7225	0.0014	0.0011	0.0003	0.0009
Root;k__Bacteria;p__Verrucomicrobia;c__Verrucomicrobiae;o__Verrucomicrobiales;f__Verrucomicrobiaceae	0.2651	0.0086	0.0003	0.0084	0.0068