

Supplementary Material

“Marked variation between winter and spring gut microbiota in free-ranging Tibetan Macaques (*Macaca thibetana*)”Binghua Sun, Xi Wang, Sofi Bernstein, Michael A. Huffman, Dong-Po Xia, Zhiyuan Gu¹, Rui Chen, Lori K. Sheeran, R.S. Wagner, Jinhua Li

Supplementary Table S1. Summary of sample information and alpha diversity

Individuals ID	Sex	Age Class	Sampling Period	Sampling Date	OTUs	ACE	Chao	Shannon	Simpson	Coverage
YRX-W	Female	Immature	Winter	2015.01.01	989	4047	2226	4.32	0.085	0.949
TXL-W	Male	Immature	Winter	2015.01.04	1156	5155	2954	5.14	0.019	0.921
TRY-W	Male	Immature	Winter	2015.01.05	3213	23218	11045	5.61	0.021	0.853
THY-W	Female	Adult	Winter	2015.01.11	1358	6526	3477	4.39	0.066	0.942
BT-W	Male	Adult	Winter	2015.01.11	1302	7022	4264	4.57	0.05	0.933
TH-W	Female	Adult	Winter	2015.01.11	1077	4466	2725	4.53	0.054	0.943
TXH-W	Female	Adult	Winter	2015.01.08	1362	5423	3580	5.11	0.018	0.935
TRG-W	Male	Immature	Winter	2015.01.11	804	3718	2128	3.73	0.112	0.943
TRYx-W	Female	Adult	Winter	2015.01.08	1358	6919	3871	4.85	0.039	0.933
TR-W	Female	Adult	Winter	2015.01.10	1885	10219	5448	4.52	0.065	0.931
ZL-W	Male	Adult	Winter	2015.01.12	1114	4474	2885	4.87	0.023	0.942
HT-W	Male	Adult	Winter	2015.01.08	994	3284	2186	5.26	0.013	0.938
TXX-W	Female	Adult	Winter	2015.01.08	1254	6485	4075	4.65	0.059	0.928
YCLO-W	Male	Immature	Winter	2015.01.04	1643	7506	4658	5.18	0.024	0.936
DS-W	Male	Adult	Winter	2015.01.12	939	3850	2251	4.43	0.054	0.95
YZ-W	Female	Adult	Winter	2015.01.05	1407	6004	3590	4.8	0.031	0.954
HH-W	Female	Adult	Winter	2015.01.11	1061	4134	2498	4.1	0.089	0.952
YXK-W	Male	Immature	Winter	2015.01.03	874	3405	2099	4.62	0.033	0.938
ZB-W	Male	Adult	Winter	2015.01.06	863	3428	2270	4.9	0.022	0.924
YM-W	Female	Adult	Winter	2015.01.12	943	3545	2323	4.74	0.029	0.945
YRB-W	Male	Adult	Winter	2015.01.18	1059	6090	3270	4.65	0.046	0.92
YRQ-S	Male	Immature	Spring	2015.03.30	1071	3409	2376	4.87	0.029	0.956
HXM-S	Male	Immature	Spring	2015.03.31	1412	5501	3954	5.16	0.022	0.944
ZL-S	Male	Adult	Spring	2015.04.01	1197	4673	2936	4.74	0.028	0.945
YH-S	Female	Adult	Spring	2015.04.01	1371	5502	3532	5.15	0.018	0.944
YCLA-S	Female	Immature	Spring	2015.03.31	1160	3105	2253	5.17	0.02	0.957
YRL-S	Female	Immature	Spring	2015.04.03	1338	5416	3167	5.21	0.02	0.922
ZB-S	Male	Adult	Spring	2015.03.30	1370	4351	3167	5.2	0.019	0.95
TRY-S	Male	Immature	Spring	2015.03.24	948	3315	1995	4.34	0.064	0.951
TXX-S	Female	Adult	Spring	2015.03.30	1236	5632	3352	5.11	0.023	0.924
HT-S	Male	Adult	Spring	2015.03.30	1198	4860	2948	5.3	0.017	0.931

TRG-S	Male	Immature	Spring	2015.04.21	1134	3887	2533	4.74	0.049	0.93
YM-S	Female	Adult	Spring	2015.04.03	1198	6593	3421	4.74	0.054	0.911
HXW-S	Female	Immature	Spring	2015.03.30	1265	5829	3721	5.35	0.015	0.929
GS-S	Male	Adult	Spring	2015.04.21	1249	8041	4075	4.3	0.072	0.948
YZ-S	Female	Adult	Spring	2015.03.30	870	3884	2145	4.21	0.046	0.957
TT-S	Female	Adult	Spring	2015.03.30	989	2751	2027	5.02	0.022	0.952
TXH-S	Female	Adult	Spring	2015.04.10	1071	3981	2404	5.3	0.011	0.939
DS-S	Male	Adult	Spring	2015.04.14	872	2344	1926	4.72	0.038	0.963
YCY-S	Female	Adult	Spring	2015.04.13	1447	6440	3814	5.19	0.022	0.919
YXX-S	Female	Adult	Spring	2015.04.10	1381	5341	3383	4.83	0.036	0.941
TH-S	Female	Adult	Spring	2015.04.20	930	3570	2245	4.92	0.025	0.927
TG-S	Male	Adult	Spring	2015.04.04	2416	15950	7644	5.47	0.019	0.917
HH-S	Female	Adult	Spring	2015.04.12	1053	3967	2516	4.81	0.044	0.934
YRB-S	Male	Adult	Spring	2015.04.20	1331	6600	3742	4.99	0.03	0.921
YXK-S	Male	Immature	Spring	2015.04.10	1369	6732	3685	5.18	0.019	0.935
BT-S	Male	Adult	Spring	2015.04.01	754	3041	1817	4.19	0.09	0.943
JT-S	Male	Adult	Spring	2015.04.10	1294	6135	3234	5.2	0.025	0.918

Supplementary Table S2. Taxonomy of Tibetan macaques' gut microbiome at phylum level (the mean relative abundance of per sample > 0.01% was presented,

each number in the table cell represent the proportion)

Samples ID	Sampling period	Taxon (phylum)					
		Spirochaetia	Proteobacteria	Firmicutes	Bacteroidetes	Actinobacteria	Verrucomicrobia
YRX-W	winter	0.01406	0.30646	0.39828	0.24926	0.00885	0.00000
TXL-W	winter	0.01505	0.10832	0.38449	0.46216	0.00022	0.00055
TRY-W	winter	0.08173	0.09133	0.42662	0.34729	0.00191	0.00055
THY-W	winter	0.03754	0.25813	0.30471	0.36960	0.01629	0.00007
BT-W	winter	0.02456	0.15715	0.42053	0.33714	0.00180	0.00086
TH-W	winter	0.00548	0.24441	0.38798	0.33003	0.00966	0.00096
TXH-W	winter	0.06829	0.06659	0.43434	0.40543	0.00070	0.00101
TRG-W	winter	0.00882	0.32877	0.22608	0.25266	0.00226	0.00068
TRYx-W	winter	0.01712	0.21671	0.37944	0.31462	0.00085	0.00108
TR-W	winter	0.08237	0.24893	0.28634	0.35201	0.01273	0.00011
ZL-W	winter	0.00545	0.07610	0.50686	0.35177	0.00767	0.00281
HT-W	winter	0.00739	0.07073	0.49737	0.34191	0.00045	0.00134
TXX-W	winter	0.00400	0.22100	0.36501	0.34074	0.00053	0.00053
YCLO-W	winter	0.01553	0.11027	0.38448	0.43402	0.00069	0.00119
DS-W	winter	0.01186	0.23954	0.28772	0.37276	0.00552	0.00091
YZ-W	winter	0.01207	0.14978	0.47836	0.31749	0.00060	0.00011
HH-W	winter	0.06387	0.38781	0.31683	0.19289	0.02117	0.00000
YXK-W	winter	0.02329	0.11074	0.37844	0.41453	0.00058	0.00210
ZB-W	winter	0.04724	0.09882	0.43369	0.39281	0.00188	0.00116
YM-W	winter	0.00523	0.16198	0.44247	0.31785	0.00177	0.00276
YRB-W	winter	0.04560	0.21377	0.36579	0.35021	0.00321	0.00057
YRQ-S	spring	0.00267	0.05353	0.56698	0.34556	0.00114	0.00183

HXM-S	spring	0.00347	0.10427	0.52608	0.33142	0.00193	0.00047
ZL-S	spring	0.00047	0.04904	0.59866	0.33512	0.00179	0.00000
YH-S	spring	0.00680	0.11929	0.49678	0.35976	0.00287	0.00028
YCLA-S	spring	0.00045	0.05205	0.57893	0.32811	0.00327	0.00007
YRL-S	spring	0.05118	0.05811	0.42496	0.41861	0.00183	0.00096
ZB-S	spring	0.01672	0.05233	0.54348	0.35824	0.00303	0.00092
TRY-S	spring	0.01748	0.23828	0.42367	0.29263	0.01667	0.00018
TXX-S	spring	0.00866	0.06699	0.48188	0.41569	0.00119	0.00109
HT-S	spring	0.00952	0.02277	0.60149	0.31881	0.00461	0.00128
TRG-S	spring	0.00637	0.18771	0.40057	0.36448	0.00191	0.00138
YM-S	spring	0.00755	0.17549	0.35762	0.40934	0.00526	0.00275
HXW-S	spring	0.01239	0.13106	0.55818	0.26730	0.00666	0.00037
GS-S	spring	0.06178	0.27426	0.37309	0.23284	0.01769	0.00019
YZ-S	spring	0.00098	0.17896	0.37369	0.40556	0.02927	0.00000
TT-S	spring	0.00622	0.15031	0.50801	0.30580	0.00254	0.00188
TXH-S	spring	0.00369	0.06396	0.52634	0.36460	0.00190	0.00170
DS-S	spring	0.02189	0.05036	0.49054	0.28486	0.00245	0.00237
YCY-S	spring	0.00431	0.09375	0.42245	0.44281	0.00153	0.00197
YXX-S	spring	0.00370	0.15862	0.40053	0.40942	0.00398	0.00014
TH-S	spring	0.01889	0.08425	0.41039	0.45995	0.01098	0.00107
TG-S	spring	0.01849	0.06806	0.48818	0.40116	0.00177	0.00162
HH-S	spring	0.01263	0.05393	0.44347	0.43720	0.00127	0.00138
YRB-S	spring	0.00232	0.12336	0.40418	0.45267	0.00149	0.00065
YXK-S	spring	0.00415	0.11236	0.45158	0.40017	0.00177	0.00184
BT-S	spring	0.06300	0.30787	0.36245	0.24461	0.00115	0.00051
JT-S	spring	0.01170	0.14183	0.52823	0.26381	0.00224	0.00051

Supplementary Table S3. Taxonomy of Tibetan macaques' gut microbiome at genus level (the mean relative abundance of per sample > 0.01% was presented,

each number in the table cell represent the proportion)

Taxon (genus)	Samples ID											
	YRQ-S	HXM-S	ZL-S	YH-S	YCLA-S	YRL-S	ZB-S	TRY-S	TXX-S	HT-S	TRG-S	YM-S
<i>Succinivibrio</i>	0.2435	0.2015	0.2652	0.1946	0.2134	0.2081	0.1729	0.2326	0.2883	0.2355	0.2329	0.1286
<i>Prevotella</i>	0.0114	0.0822	0.0250	0.0209	0.0045	0.0399	0.0315	0.2258	0.0310	0.0016	0.1762	0.1439
<i>Porphyromonadaceae</i>												
<i>(OTU00002)</i>	0.0464	0.0206	0.0585	0.0175	0.0262	0.0308	0.0439	0.0596	0.0512	0.0977	0.0333	0.0333
<i>Treponema</i>	0.0049	0.0078	0.0125	0.0025	0.0004	0.0826	0.0120	0.0030	0.0455	0.0000	0.0260	0.1733
<i>Helicobacter</i>	0.0255	0.0091	0.0099	0.0643	0.0367	0.0038	0.0124	0.0038	0.0125	0.0151	0.0030	0.0112
<i>Bacteroidetes</i>												
<i>(OTU00009)</i>	0.0700	0.0199	0.0103	0.0084	0.0125	0.0130	0.0317	0.0063	0.0120	0.0186	0.0124	0.0094
<i>Faecalibacterium</i>	0.0280	0.0141	0.0032	0.0370	0.0221	0.0121	0.0149	0.0089	0.0084	0.0124	0.0131	0.0118
<i>Oscillibacter</i>	0.0027	0.0035	0.0005	0.0068	0.0004	0.0512	0.0167	0.0175	0.0087	0.0095	0.0064	0.0076
<i>Clostridium XIVa</i>	0.0042	0.0083	0.0045	0.0176	0.0053	0.0225	0.0046	0.0523	0.0119	0.0027	0.0116	0.0074
<i>Ruminococcus</i>	0.0170	0.0034	0.0418	0.0228	0.0092	0.0059	0.0095	0.0090	0.0227	0.0196	0.0027	0.0048
<i>Clostridium sensu stricto</i>	0.0326	0.0012	0.0001	0.0386	0.0040	0.0183	0.0264	0.0029	0.0313	0.0077	0.0197	0.0064
<i>Alloprevotella</i>	0.0145	0.0108	0.0189	0.0119	0.0080	0.0076	0.0085	0.0086	0.0204	0.0106	0.0044	0.0043
<i>Dialister</i>	0.0005	0.0055	0.0063	0.0099	0.0261	0.0022	0.0091	0.0280	0.0008	0.0126	0.0121	0.0016
<i>Barnesiella</i>	0.0078	0.0047	0.0272	0.0044	0.0110	0.0072	0.0029	0.0064	0.0061	0.0069	0.0075	0.0300
<i>Clostridium XI</i>	0.0013	0.0034	0.0300	0.0102	0.0046	0.0047	0.0038	0.0112	0.0066	0.0050	0.0022	0.0042
<i>Blautia</i>	0.0069	0.0059	0.0033	0.0023	0.0067	0.0087	0.0030	0.0017	0.0101	0.0187	0.0019	0.0157

<i>Roseburia</i>	0.0066	0.0059	0.0085	0.0070	0.0102	0.0031	0.0074	0.0094	0.0049	0.0169	0.0039	0.0048
<i>Coprococcus</i>	0.0008	0.0050	0.0003	0.0043	0.0004	0.0036	0.0099	0.0197	0.0020	0.0002	0.0049	0.0056
<i>Lachnospiraceae_</i>												
<i>incertae_sedis</i>	0.0008	0.0033	0.0000	0.0022	0.0034	0.0184	0.0005	0.0149	0.0075	0.0003	0.0075	0.0074
<i>Escherichia/Shigella</i>	0.0027	0.0015	0.0091	0.0060	0.0036	0.0018	0.0053	0.0092	0.0057	0.0094	0.0013	0.0019
<i>Clostridium IV</i>	0.0088	0.0022	0.0002	0.0107	0.0044	0.0023	0.0084	0.0038	0.0054	0.0048	0.0030	0.0062
<i>Butyricoccus</i>	0.0023	0.0059	0.0006	0.0008	0.0027	0.0013	0.0049	0.0050	0.0193	0.0081	0.0046	0.0014
<i>Catenibacterium</i>	0.0005	0.0041	0.0068	0.0025	0.0032	0.0048	0.0024	0.0022	0.0057	0.0034	0.0047	0.0064
<i>Anaerostipes</i>	0.0084	0.0037	0.0010	0.0114	0.0042	0.0015	0.0040	0.0055	0.0042	0.0028	0.0003	0.0008
<i>Gemmiger</i>	0.0051	0.0030	0.0012	0.0050	0.0040	0.0019	0.0051	0.0009	0.0032	0.0047	0.0015	0.0034
<i>Subdivision5_genera_</i>												
<i>incertae_sedis</i>	0.0008	0.0009	0.0017	0.0048	0.0021	0.0014	0.0011	0.0029	0.0017	0.0014	0.0012	0.0011
<i>Flavonifractor</i>	0.0011	0.0027	0.0028	0.0015	0.0025	0.0008	0.0016	0.0006	0.0013	0.0009	0.0023	0.0003
<i>Dorea</i>	0.0008	0.0018	0.0043	0.0013	0.0008	0.0010	0.0016	0.0002	0.0011	0.0017	0.0010	0.0001
<i>Clostridium XIVb</i>	0.0018	0.0005	0.0000	0.0003	0.0001	0.0010	0.0009	0.0002	0.0011	0.0013	0.0014	0.0026
<i>Erysipelotrichaceae_</i>												
<i>incertae_sedis</i>	0.0000	0.0002	0.0003	0.0009	0.0005	0.0002	0.0003	0.0005	0.0005	0.0009	0.0003	0.0001
Taxon (genus)	Samples ID											
	HXW-S	GS-S	YZ-S	TT-S	TXH-S	DS-S	YCY-S	YXX-S	TH-S	TG-S	HH-S	YRB-S
<i>Succinivibrio</i>	0.1861	0.0978	0.3781	0.2075	0.1298	0.0353	0.2515	0.2993	0.3500	0.2516	0.1288	0.3389
<i>Prevotella</i>	0.0470	0.2539	0.1348	0.0623	0.0173	0.0018	0.0718	0.1230	0.0648	0.0417	0.0235	0.0806
<i>Porphyromonadaceae</i>												
<i>(OTU00002)</i>	0.0271	0.0054	0.0311	0.0390	0.0343	0.0065	0.0458	0.0711	0.0954	0.0401	0.0278	0.0287
<i>Treponema</i>	0.0134	0.0295	0.0000	0.0073	0.0190	0.0237	0.0494	0.0267	0.0063	0.0435	0.1884	0.0066
<i>Helicobacter</i>	0.0733	0.0081	0.0252	0.0731	0.0046	0.0056	0.0048	0.0095	0.0050	0.0096	0.0177	0.0120
<i>Bacteroidetes</i>												
<i>(OTU00009)</i>	0.0200	0.0014	0.0098	0.0138	0.0125	0.0128	0.0376	0.0069	0.0095	0.0098	0.0157	0.0158
<i>Faecalibacterium</i>	0.0158	0.0196	0.0025	0.0135	0.0278	0.0226	0.0175	0.0156	0.0091	0.0103	0.0091	0.0120
<i>Oscillibacter</i>	0.0124	0.0617	0.0010	0.0062	0.0037	0.0219	0.0043	0.0036	0.0189	0.0185	0.0126	0.0023
<i>Clostridium XIVa</i>	0.0070	0.0217	0.0333	0.0039	0.0092	0.0014	0.0095	0.0193	0.0344	0.0135	0.0032	0.0203
<i>Ruminococcus</i>	0.0088	0.0028	0.0713	0.0120	0.0032	0.0035	0.0048	0.0068	0.0100	0.0086	0.0065	0.0094
<i>Clostridium sensu stricto</i>	0.0172	0.0114	0.0004	0.0044	0.0213	0.0000	0.0153	0.0096	0.0054	0.0106	0.0006	0.0080
<i>Alloprevotella</i>	0.0154	0.0038	0.0183	0.0151	0.0080	0.0047	0.0026	0.0051	0.0151	0.0065	0.0072	0.0135
<i>Dialister</i>	0.0006	0.0110	0.0083	0.0214	0.0171	0.0000	0.0137	0.0018	0.0142	0.0020	0.0029	0.0145
<i>Barnesiella</i>	0.0056	0.0040	0.0037	0.0059	0.0054	0.0003	0.0085	0.0063	0.0283	0.0084	0.0023	0.0159
<i>Clostridium XI</i>	0.0086	0.0126	0.0134	0.0020	0.0031	0.0004	0.0035	0.0056	0.0046	0.0230	0.0050	0.0265
<i>Blautia</i>	0.0096	0.0002	0.0046	0.0088	0.0061	0.0128	0.0051	0.0055	0.0038	0.0191	0.0205	0.0038
<i>Roseburia</i>	0.0059	0.0010	0.0154	0.0089	0.0068	0.0014	0.0033	0.0094	0.0023	0.0157	0.0040	0.0067
<i>Coprococcus</i>	0.0013	0.0150	0.0069	0.0013	0.0010	0.0001	0.0011	0.0009	0.0048	0.0186	0.0005	0.0034
<i>Lachnospiraceae_</i>												
<i>incertae_sedis</i>	0.0022	0.0013	0.0008	0.0057	0.0083	0.0000	0.0046	0.0075	0.0060	0.0002	0.0039	0.0005
<i>Escherichia/Shigella</i>	0.0059	0.0012	0.0033	0.0073	0.0034	0.0016	0.0025	0.0026	0.0095	0.0055	0.0013	0.0059
<i>Clostridium IV</i>	0.0031	0.0002	0.0033	0.0047	0.0005	0.0034	0.0019	0.0016	0.0028	0.0104	0.0006	0.0046
<i>Butyricoccus</i>	0.0029	0.0003	0.0015	0.0110	0.0054	0.0003	0.0046	0.0020	0.0007	0.0028	0.0024	0.0014
<i>Catenibacterium</i>	0.0028	0.0003	0.0026	0.0024	0.0049	0.0008	0.0042	0.0075	0.0027	0.0066	0.0051	0.0049
<i>Anaerostipes</i>	0.0017	0.0014	0.0162	0.0030	0.0016	0.0074	0.0006	0.0014	0.0021	0.0006	0.0021	0.0007
<i>Gemmiger</i>	0.0033	0.0003	0.0010	0.0026	0.0049	0.0035	0.0022	0.0021	0.0039	0.0029	0.0035	0.0026
<i>Subdivision5_genera_</i>												
<i>incertae_sedis</i>	0.0023	0.0009	0.0102	0.0017	0.0015	0.0000	0.0015	0.0033	0.0043	0.0060	0.0012	0.0073
<i>Flavonifractor</i>	0.0009	0.0026	0.0002	0.0023	0.0012	0.0012	0.0012	0.0014	0.0008	0.0021	0.0003	0.0017
<i>Dorea</i>	0.0010	0.0002	0.0002	0.0003	0.0026	0.0004	0.0006	0.0011	0.0025	0.0005	0.0011	0.0000
<i>Clostridium XIVb</i>	0.0004	0.0002	0.0000	0.0019	0.0016	0.0024	0.0020	0.0001	0.0011	0.0016	0.0014	0.0007
<i>Erysipelotrichaceae_</i>												
<i>incertae_sedis</i>	0.0003	0.0001	0.0020	0.0003	0.0003	0.0004	0.0005	0.0008	0.0007	0.0005	0.0001	0.0008

incertae_sedis												
Taxon (genus)	Samples ID											
	YXK-S	BT-S	JT-S	YRX-W	TXL-W	TRY-W	THY-W	BT-W	TH-W	TXH-W	TRG-W	TRYx-W
<i>Succinivibrio</i>	0.2325	0.1106	0.1578	0.2849	0.0538	0.0549	0.2379	0.1242	0.2065	0.0455	0.2827	0.1506
<i>Prevotella</i>	0.0835	0.2909	0.1194	0.1817	0.1933	0.0720	0.2873	0.0357	0.1237	0.2022	0.1580	0.0796
<i>Porphyromonadaceae</i>												
(<i>OTU00002</i>)	0.0305	0.0008	0.0781	0.0029	0.0138	0.0701	0.0012	0.1683	0.0839	0.0295	0.0069	0.1053
<i>Treponema</i>	0.0559	0.0074	0.0001	0.0141	0.0150	0.0817	0.0375	0.0243	0.0055	0.0683	0.0088	0.0170
<i>Helicobacter</i>	0.0025	0.0088	0.0077	0.0107	0.0095	0.0054	0.0028	0.0181	0.0277	0.0060	0.0399	0.0458
<i>Bacteroidetes</i>												
(<i>OTU00009</i>)	0.0116	0.0078	0.0285	0.0042	0.0269	0.0559	0.0026	0.0358	0.0107	0.0206	0.0024	0.0294
<i>Faecalibacterium</i>	0.0199	0.0075	0.0105	0.0338	0.0143	0.0049	0.0447	0.0041	0.0103	0.0322	0.0122	0.0130
<i>Oscillibacter</i>	0.0042	0.0629	0.0117	0.0132	0.0194	0.0139	0.0156	0.0184	0.0120	0.0149	0.0069	0.0077
<i>Clostridium XIVa</i>	0.0153	0.0110	0.0003	0.0070	0.0128	0.0075	0.0067	0.0160	0.0111	0.0277	0.0137	0.0153
<i>Ruminococcus</i>	0.0076	0.0027	0.0082	0.0093	0.0100	0.0514	0.0082	0.0058	0.0452	0.0487	0.0135	0.0057
<i>Clostridium sensu stricto</i>	0.0199	0.0000	0.0007	0.0687	0.0018	0.0148	0.0426	0.0032	0.0036	0.0096	0.0080	0.0050
<i>Alloprevotella</i>	0.0089	0.0064	0.0096	0.0062	0.0835	0.0022	0.0200	0.0026	0.0044	0.0146	0.0035	0.0046
<i>Dialister</i>	0.0111	0.0057	0.0102	0.0161	0.0030	0.0032	0.0167	0.0078	0.0146	0.0047	0.0089	0.0064
<i>Barnesiella</i>	0.0073	0.0038	0.0087	0.0046	0.0037	0.0023	0.0066	0.0015	0.0014	0.0249	0.0055	0.0025
<i>Clostridium XI</i>	0.0095	0.0045	0.0043	0.0042	0.0042	0.0026	0.0019	0.0015	0.0017	0.0140	0.0028	0.0033
<i>Blautia</i>	0.0063	0.0001	0.0022	0.0020	0.0046	0.0023	0.0015	0.0014	0.0019	0.0024	0.0029	0.0024
<i>Roseburia</i>	0.0046	0.0046	0.0082	0.0010	0.0054	0.0036	0.0036	0.0128	0.0005	0.0022	0.0025	0.0003
<i>Coprococcus</i>	0.0048	0.0253	0.0154	0.0050	0.0018	0.0002	0.0088	0.0013	0.0008	0.0008	0.0012	0.0013
<i>Lachnospiracea_</i>												
<i>incertae_sedis</i>	0.0104	0.0020	0.0017	0.0014	0.0066	0.0008	0.0023	0.0006	0.0010	0.0028	0.0017	0.0044
<i>Escherichia/Shigella</i>	0.0050	0.0028	0.0050	0.0013	0.0017	0.0007	0.0015	0.0022	0.0004	0.0032	0.0008	0.0066
<i>Clostridium IV</i>	0.0020	0.0031	0.0141	0.0036	0.0034	0.0029	0.0009	0.0013	0.0017	0.0026	0.0010	0.0029
<i>Butyricoccus</i>	0.0039	0.0026	0.0032	0.0001	0.0074	0.0005	0.0001	0.0000	0.0001	0.0033	0.0005	0.0074
<i>Catenibacterium</i>	0.0032	0.0014	0.0026	0.0010	0.0075	0.0014	0.0003	0.0001	0.0004	0.0016	0.0009	0.0063
<i>Anaerostipes</i>	0.0012	0.0006	0.0004	0.0000	0.0015	0.0007	0.0007	0.0002	0.0001	0.0044	0.0011	0.0040
<i>Gemmiger</i>	0.0025	0.0010	0.0039	0.0022	0.0007	0.0006	0.0030	0.0004	0.0006	0.0015	0.0000	0.0004
<i>Subdivision5_genera_</i>												
<i>incertae_sedis</i>	0.0020	0.0011	0.0023	0.0000	0.0006	0.0006	0.0001	0.0009	0.0010	0.0010	0.0007	0.0011
<i>Flavonifractor</i>	0.0009	0.0022	0.0012	0.0016	0.0007	0.0008	0.0009	0.0010	0.0005	0.0006	0.0005	0.0009
<i>Dorea</i>	0.0002	0.0001	0.0008	0.0004	0.0017	0.0013	0.0004	0.0002	0.0000	0.0009	0.0006	0.0006
<i>Clostridium XIVb</i>	0.0018	0.0005	0.0005	0.0016	0.0015	0.0001	0.0004	0.0001	0.0006	0.0006	0.0003	0.0002
<i>Erysipelotrichaceae_</i>												
<i>incertae_sedis</i>	0.0005	0.0000	0.0002	0.0004	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0001
Taxon (genus)	Samples ID											
	HT-W	TXX-W	YCLO-W	DS-W	YZ-W	HH-W	YXK-W	ZB-W	YM-W	YRB-W	TR-W	ZL-W
<i>Succinivibrio</i>	0.0383	0.1814	0.0774	0.1975	0.0989	0.2752	0.0629	0.0870	0.1097	0.1815	0.2205	0.0223
<i>Prevotella</i>	0.1189	0.0793	0.1450	0.2313	0.0476	0.1147	0.0352	0.1292	0.0704	0.1508	0.2679	0.0580
<i>Porphyromonadaceae</i>												
(<i>OTU00002</i>)	0.0572	0.1556	0.0984	0.0110	0.1094	0.0002	0.1309	0.0316	0.0894	0.0770	0.0037	0.0988
<i>Treponema</i>	0.0074	0.0040	0.0155	0.0119	0.0121	0.0638	0.0233	0.0472	0.0052	0.0456	0.0823	0.0055
<i>Helicobacter</i>	0.0104	0.0192	0.0201	0.0277	0.0352	0.1026	0.0082	0.0038	0.0336	0.0102	0.0184	0.0316
<i>Bacteroidetes</i>												
(<i>OTU00009</i>)	0.0346	0.0055	0.0120	0.0364	0.0222	0.0132	0.0348	0.0175	0.0035	0.0308	0.0088	0.0099
<i>Faecalibacterium</i>	0.0040	0.0089	0.0155	0.0133	0.0055	0.0374	0.0014	0.0051	0.0090	0.0285	0.0417	0.0029
<i>Oscillibacter</i>	0.0188	0.0071	0.0187	0.0131	0.0121	0.0154	0.0084	0.0261	0.0292	0.0074	0.0074	0.0294
<i>Clostridium XIVa</i>	0.0339	0.0100	0.0206	0.0155	0.0375	0.0044	0.0235	0.0116	0.0124	0.0095	0.0087	0.0078
<i>Ruminococcus</i>	0.0079	0.0068	0.0074	0.0082	0.0140	0.0104	0.0064	0.0051	0.0041	0.0149	0.0164	0.0072
<i>Clostridium sensu stricto</i>	0.0020	0.0040	0.0031	0.0204	0.0007	0.0293	0.0047	0.0157	0.0047	0.0189	0.0134	0.0026

<i>Alloprevotella</i>	0.0011	0.0113	0.0267	0.0032	0.0088	0.0019	0.0017	0.0004	0.0007	0.0039	0.0073	0.0009
<i>Dialister</i>	0.0018	0.0085	0.0033	0.0048	0.0078	0.0184	0.0031	0.0052	0.0096	0.0150	0.0132	0.0091
<i>Barnesiella</i>	0.0104	0.0012	0.0073	0.0016	0.0001	0.0020	0.0010	0.0428	0.0003	0.0029	0.0031	0.0001
<i>Clostridium XI</i>	0.0103	0.0037	0.0092	0.0003	0.0015	0.0033	0.0033	0.0074	0.0023	0.0071	0.0031	0.0003
<i>Blautia</i>	0.0028	0.0055	0.0064	0.0005	0.0010	0.0081	0.0003	0.0020	0.0009	0.0079	0.0032	0.0012
<i>Roseburia</i>	0.0010	0.0025	0.0015	0.0005	0.0007	0.0055	0.0014	0.0027	0.0032	0.0023	0.0045	0.0003
<i>Coprococcus</i>	0.0003	0.0013	0.0015	0.0014	0.0009	0.0152	0.0010	0.0012	0.0003	0.0010	0.0108	0.0000
<i>Lachnospiracea_</i>												
<i>incertae_sedis</i>	0.0030	0.0042	0.0050	0.0016	0.0023	0.0030	0.0012	0.0004	0.0009	0.0050	0.0044	0.0007
<i>Escherichia/Shigella</i>	0.0015	0.0009	0.0011	0.0022	0.0065	0.0031	0.0013	0.0030	0.0017	0.0009	0.0006	0.0008
<i>Clostridium IV</i>	0.0018	0.0025	0.0008	0.0045	0.0011	0.0010	0.0001	0.0017	0.0013	0.0009	0.0015	0.0013
<i>Butyricoccus</i>	0.0027	0.0023	0.0043	0.0004	0.0030	0.0010	0.0006	0.0001	0.0005	0.0015	0.0009	0.0000
<i>Catenibacterium</i>	0.0016	0.0014	0.0015	0.0001	0.0024	0.0031	0.0001	0.0007	0.0004	0.0032	0.0006	0.0000
<i>Anaerostipes</i>	0.0006	0.0031	0.0013	0.0008	0.0004	0.0022	0.0016	0.0009	0.0000	0.0027	0.0009	0.0000
<i>Gemmiger</i>	0.0001	0.0007	0.0019	0.0003	0.0007	0.0036	0.0007	0.0007	0.0002	0.0013	0.0044	0.0005
<i>Subdivision5_genera_</i>												
<i>incertae_sedis</i>	0.0013	0.0005	0.0011	0.0009	0.0001	0.0000	0.0021	0.0012	0.0028	0.0006	0.0001	0.0028
<i>Flavonifractor</i>	0.0007	0.0005	0.0010	0.0005	0.0011	0.0007	0.0001	0.0009	0.0008	0.0009	0.0007	0.0009
<i>Dorea</i>	0.0002	0.0005	0.0016	0.0001	0.0006	0.0006	0.0001	0.0007	0.0001	0.0014	0.0013	0.0002
<i>Clostridium XIVb</i>	0.0004	0.0008	0.0003	0.0005	0.0005	0.0006	0.0005	0.0003	0.0004	0.0000	0.0003	0.0008
<i>Erysipelotrichaceae_</i>												
<i>incertae_sedis</i>	0.0004	0.0004	0.0001	0.0002	0.0002	0.0010	0.0001	0.0001	0.0001	0.0002	0.0007	0.0000
