Table S8 Species-level species abundance of THS

Species	THS1	THS2	THS3	THS4	THS5	Average	Proportion (%)
Selenomonas_bovis	0.005173	0.001172	0.092643	0.010151	0.108121	0.043452	4.35
Prevotella_ruminicola	0.022743	0.007749	0.004798	0.007834	0.003649	0.009354	0.94
Prevotella_multisaccharivorax	0.022651	0.010755	0.045133	0.060699	0.044864	0.036820	3.68
Prevotella_sp._AGR2160	0.025781	0.006195	0.045042	0.039212	0.037838	0.030814	3.08
Selenomonas_ruminantium	0.014468	0.035354	0.025784	0.003526	0.027288	0.021284	2.13
Prevotella_sp._ne3005	0.015134	0.004188	0.001574	0.000815	0.001610	0.004664	0.47
Succiniclasticum_ruminis	0.024594	0.014214	0.002625	0.000176	0.017831	0.011888	1.19
Dialister_succinatiphilus	0.000177	0.002681	0.024889	0.047965	0.039887	0.023120	2.31
Prevotella_sp._tc2_28	0.007926	0.006358	0.003239	0.003163	0.003113	0.004760	0.48
Prevotella_sp._tf2_5	0.003580	0.022332	0.001002	0.000595	0.003969	0.006296	0.63
Others	0.580136	0.578185	0.470004	0.552584	0.439599	0.524101	52.41
Unclassified	0.275955	0.295501	0.282204	0.270675	0.269974	0.278862	27.89
Unassigned	0.001683	0.015317	0.001063	0.002607	0.002258	0.004585	0.46
Total	1	1	1	1	1	1	100

Table S9 Species-level species abundance of HTS

Species	HTS1	HTS2	HTS3	HTS4	HTS5	Average	Proportion (%)
Selenomonas_bovis	0.000938	0.000035	0.000066	0.000043	0.000033	0.000223	0.02
Prevotella_ruminicola	0.025912	0.033316	0.031037	0.021428	0.035503	0.029439	2.94
Prevotella_multisaccharivorax	0.000249	0.000396	0.000298	0.000287	0.000311	0.000308	0.03
Prevotella_sp._AGR2160	0.000470	0.000813	0.000645	0.000686	0.000885	0.000700	0.07
Selenomonas_ruminantium	0.018691	0.002065	0.003509	0.001790	0.001311	0.005473	0.55
Prevotella_sp._ne3005	0.012821	0.025706	0.016820	0.013547	0.028354	0.019449	1.94
Succiniclasticum_ruminis	0.013172	0.012371	0.012380	0.009198	0.013930	0.012210	1.22
Dialister_succinatiphilus	0.000033	0.000015	0.000017	0.000014	0.000019	0.000019	0.00
Prevotella_sp._tc2_28	0.013549	0.016676	0.017895	0.007756	0.025121	0.016199	1.62
Prevotella_sp._tf2_5	0.009836	0.018414	0.009590	0.008476	0.023193	0.013902	1.39
Others	0.533638	0.505276	0.501083	0.555107	0.465043	0.512029	51.20
Unclassified	0.355632	0.371919	0.391130	0.369476	0.397974	0.377226	37.72
Unassigned	0.015059	0.012999	0.015530	0.012191	0.008326	0.012821	1.28
Total	1	1	1	1	1	1	100