

Additional file 6: Table S5A Metastats analysis of the most proportionally abundant operational taxonomic units (OTUs accounting for > 0.5 % of total proportional abundance between washout and AXOS supplement periods) for the *Prevotella*-plus volunteer group. P-values less than $p < 0.001$ are shown in bold. P values were corrected using the Benjamini-Hochberg method (Benjamini, Hochberg 1995) to account for multiple comparisons.

OTU	<u>MegaBLAST Closest Match (Representative Seq.)</u>	No. of seq	Mean of Washout (%)	Mean of AXOS (%)	p-value	Significant after applying Benjamini-Hochberg correction
Otu0002	<i>Prevotella copri</i>	21373	8.15	15.64	0.036	No
Otu0012	<i>Prevotella</i> spp.	8193	2.99	6.49	0.022	No
Otu0001	<i>Bacteroides vulgatus</i> (99%)	7311	3.80	2.01	0.001	Yes
Otu0013	<i>Escherichia coli</i>	7060	3.64	2.76	0.678	No
Otu0004	<i>Faecalibacterium prausnitzii</i> (99%)	6238	3.08	2.84	0.645	No
Otu0022	<i>Prevotella ruminicola</i>	5971	2.05	4.20	0.464	No
Otu0005	<i>Faecalibacterium prausnitzii</i>	3748	1.87	1.46	0.315	No
Otu0016	<i>Barnesiella intestinihominis</i>	3475	1.58	1.51	0.868	No
Otu0006	<i>Ruminococcus bicirculans</i> (99%)	3258	1.63	1.21	0.448	No
Otu0003	<i>Bacteroides uniformis</i>	3110	1.59	0.98	0.404	No
Otu0010	<i>Faecalibacterium prausnitzii</i> (99%)	2841	1.30	1.60	0.502	No
Otu0008	<i>Faecalibacterium prausnitzii</i> (98%)	2525	1.16	1.23	0.825	No
Otu0051	<i>Catenibacterium mitsuokai</i> (99%)	2273	0.91	0.97	0.911	No
Otu0018	Uncharacterised <i>Ruminococcaceae</i>	2271	1.12	1.10	0.970	No
Otu0017	<i>Faecalibacterium prausnitzii</i>	2223	1.03	1.08	0.832	No
Otu0058	Uncharacterised <i>Bacteria</i>	1995	0.90	0.51	0.309	No
Otu0037	<i>Intestinibacter bartlettii</i> (98%)	1978	1.06	0.64	0.140	No
Otu0009	<i>Bacteroides dorei</i>	1889	1.16	0.57	0.144	No
Otu0052	<i>Sutterella massiliensis</i>	1808	0.90	0.63	0.478	No
Otu0030	<i>Ruminococcus bromii</i> (99%)	1698	0.88	0.53	0.290	No
Otu0028	<i>Alistipes putredinis</i>	1670	0.83	0.64	0.104	No
Otu0044	Uncharacterised <i>Ruminococcaceae</i>	1663	0.90	0.50	0.068	No
Otu0075	<i>Prevotella copri</i> (97%)	1660	0.89	0.58	0.485	No
Otu0072	<i>Dialister invisus</i>	1621	0.61	1.04	0.392	No
Otu0032	<i>Romboutsia timonensis</i> (99%)	1601	0.74	0.67	0.694	No
Otu0014	<i>Bifidobacterium adolescentis</i>	1555	0.44	1.58	0.037	No
Otu0021	<i>Eubacterium rectale</i>	1532	0.69	0.76	0.798	No
Otu0035	<i>Roseburia faecis</i>	1470	0.57	0.97	0.144	No
Otu0025	<i>Collinsella aerofaciens</i>	1437	0.71	0.62	0.665	No
Otu0015	<i>Anaerostipes hadrus</i>	1407	0.58	0.77	0.496	No
Otu0092	<i>Bacteroides</i> spp.	1344	0.85	0.44	0.484	No
Otu0067	Uncharacterised <i>Erysipelotrichaceae</i>	1329	0.72	0.41	0.502	No
Otu0100	Uncharacterised <i>Bacteria</i>	1223	0.49	0.89	0.568	No
Otu0106	Uncharacterised <i>Bacteroidetes</i>	1203	0.66	0.46	0.566	No
Otu0045	<i>Faecalibacterium prausnitzii</i> (97%)	1176	0.56	0.55	0.941	No
Otu0060	<i>Faecalibacterium prausnitzii</i> (98%)	1170	0.58	0.58	0.988	No
Otu0011	<i>Bifidobacterium longum</i>	1151	0.36	0.93	0.007	No
Otu0073	<i>Phascolarctobacterium</i> sp. (99%)	1126	0.61	0.44	0.592	No
Otu0007	<i>Guyana massiliensis</i>	1118	0.54	0.31	0.067	No
Otu0079	<i>Alistipes</i> spp.	1098	0.55	0.41	0.695	No
Otu0048	<i>Subdoligranulum</i> sp.	1096	0.59	0.48	0.602	No

Additional file 6: Table S5B Metastats analysis of the most proportionally abundant operational taxonomic units (OTUs accounting for > 0.5 % of total proportional abundance between washout and AXOS supplement periods) for the *Prevotella*-minus group. P-values less than $p < 0.001$ are shown in bold. P values were corrected using the Benjamini-Hochberg method (Benjamini, Hochberg 1995) to account for multiple comparisons.

OTU	<u>MegaBLAST Closest Match (Representative Seq.)</u>	No. of seq	Mean of Washout (%)	Mean of AXOS (%)	p-value	Significant after applying Benjamini-Hochberg correction
Otu0001	<i>Bacteroides vulgatus</i> (99%)	19767	5.66	5.27	0.797	No
Otu0003	<i>Bacteroides uniformis</i>	16905	4.97	4.36	0.486	No
Otu0004	<i>Faecalibacterium prausnitzii</i> (99%)	12018	3.59	3.13	0.433	No
Otu0007	<i>Guyana massiliensis</i>	7764	2.01	1.61	0.584	No
Otu0005	<i>Faecalibacterium prausnitzii</i>	7179	1.86	2.25	0.289	No
Otu0011	<i>Bifidobacterium longum</i>	7174	1.55	3.14	0.001	Yes
Otu0006	<i>Ruminococcus bicirculans</i> (99%)	6719	1.79	2.01	0.714	No
Otu0009	<i>Bacteroides dorei</i>	6568	1.90	1.74	0.807	No
Otu0008	<i>Faecalibacterium prausnitzii</i> (98%)	6325	1.75	1.72	0.948	No
Otu0014	<i>Bifidobacterium adolescentis</i>	5787	1.16	3.13	0.003	No
Otu0020	<i>Bacteroides cellulosilyticus</i>	5757	1.69	1.37	0.488	No
Otu0019	<i>Streptococcus salivarius</i>	5715	1.65	1.61	0.953	No
Otu0010	<i>Faecalibacterium prausnitzii</i> (99%)	5579	1.33	1.90	0.230	No
Otu0015	<i>Anaerostipes hadrus</i>	5278	1.47	1.36	0.758	No
Otu0024	Uncharacterised <i>Rikenellaceae</i>	4799	1.18	1.56	0.756	No
Otu0021	<i>Eubacterium rectale</i>	4502	1.09	1.70	0.188	No
Otu0017	<i>Faecalibacterium prausnitzii</i>	4372	1.21	1.23	0.935	No
Otu0018	Uncharacterised <i>Ruminococcaceae</i>	4329	1.18	1.03	0.839	No
Otu0023	<i>Subdoligranulum</i> sp. (97%)	4055	1.19	0.99	0.485	No
Otu0026	<i>Bacteroides massiliensis</i>	3768	1.14	0.62	0.241	No
Otu0029	<i>Bacteroides stercoris</i> (99%)	3477	1.02	1.01	0.986	No
Otu0016	<i>Barnesiella intestinihominis</i>	3168	0.92	0.83	0.688	No
Otu0027	<i>Sutterella wadsworthensis</i>	3116	0.95	0.86	0.841	No
Otu0038	Uncharacterised <i>Firmicutes</i>	2952	0.87	0.93	0.852	No
Otu0031	<i>Bifidobacterium faecale/adolescentis</i>	2938	0.53	1.63	0.004	No
Otu0040	Uncharacterised <i>Rikenellaceae</i>	2912	0.74	0.91	0.887	No
Otu0033	Uncharacterised <i>Alphaproteobacteria</i>	2662	0.91	0.32	0.532	No
Otu0034	<i>Collinsella aerofaciens</i>	2634	0.72	0.69	0.896	No
Otu0025	<i>Collinsella aerofaciens</i>	2578	0.73	0.63	0.589	No
Otu0042	<i>Bifidobacterium catenulatum</i> (98%)	2552	0.47	1.45	0.183	No
Otu0036	<i>Blautia</i> sp. (99%)	2527	0.66	0.78	0.342	No
Otu0039	<i>Bacteroides eggerthii</i> (99%)	2514	0.63	0.82	0.610	No
Otu0041	<i>Bifidobacterium pseudocatenulatum</i>	2449	0.51	1.09	0.326	No
Otu0028	<i>Alistipes putredinis</i>	2406	0.72	0.60	0.266	No
Otu0053	Uncharacterised <i>Rikenellaceae</i>	2215	0.58	0.77	0.779	No
Otu0043	<i>Bacteroides ovatus</i> (99%)	2135	0.59	0.75	0.448	No
Otu0054	<i>Sutterella</i> sp.	2126	0.55	0.77	0.504	No
Otu0047	<i>Fusicatenibacter saccharivorans</i> (97%)	2122	0.53	0.69	0.380	No
Otu0030	<i>Ruminococcus bromii</i> (99%)	2121	0.70	0.37	0.088	No
Otu0049	<i>Alistipes onderdonkii</i>	2069	0.65	0.60	0.877	No
Otu0046	<i>Blautia</i> sp. (99%)	2020	0.47	0.66	0.205	No
Otu0063	Uncharacterised <i>Clostridiales</i>	1864	0.51	0.60	0.803	No
Otu0059	<i>Parabacteroides merdae</i>	1838	0.58	0.50	0.655	No
Otu0062	<i>Eubacterium siraeum</i> (99%)	1803	0.53	0.52	0.969	No
Otu0032	<i>Romboutsia timonensis</i> (99%)	1793	0.57	0.31	0.052	No