

Additional File 7. Relative abundance of outset bacterial genera (mean of 3 pre-diet days) between animals grouped into quartiles by outset acetate concentrations (mean of 3 pre-diet days).

	Quartiles of outset Acetate concentration				SED	Benjamini-Hochberg P-value
	1	2	3	4		
<i>Unclassified</i>	0.690	0.661	0.549	0.596	0.039	0.376
<i>Fibrobacter</i>	0.080	0.110	0.287	0.201	0.077	0.133
<i>Treponema</i>	0.037	0.038	0.015	0.018	0.021	0.051
<i>Phascolarctobacterium</i>	0.027	0.023	0.014	0.010	0.021	0.133
<i>Alkalitalea</i>	0.027	0.019	0.035	0.002	0.082	0.620
<i>Prevotella</i>	0.016	0.012	0.020	0.016	0.039	0.992
<i>Paraprevotella</i>	0.012	0.012	0.008	0.021	0.021	0.404
<i>Paludibacter</i>	0.012	0.013	0.007	0.029	0.050	0.676
<i>Alloprevotella</i>	0.010	0.004	0.001	0.003	0.028	0.453
<i>Ruminococcus</i>	0.010	0.013	0.007	0.010	0.024	0.870
<i>Oscillibacter</i>	0.009	0.007	0.005	0.006	0.012	0.423
<i>Barnesiella</i>	0.008	0.009	0.003	0.032	0.055	0.542
<i>Clostridium XIVa</i>	0.007	0.007	0.006	0.004	0.013	0.423
<i>Lachnospiracea</i>	0.005	0.005	0.004	0.005	0.009	0.978
<i>Rikenella</i>	0.005	0.009	0.006	0.008	0.013	0.433
<i>Phocaeicola</i>	0.004	0.014	0.008	0.009	0.028	0.432
<i>Anaeroplasma</i>	0.004	0.007	0.004	0.003	0.015	0.423
<i>Faecalitalea</i>	0.003	0.003	0.001	0.002	0.010	0.115
<i>Asteroleplasma</i>	0.003	0.001	0.002	0.001	0.021	0.870
<i>Macellibacteroides</i>	0.003	0.000	0.000	0.000	0.023	0.579
<i>Anaerovorax</i>	0.003	0.002	0.001	0.001	0.004	0.027
<i>Sphaerochaeta</i>	0.002	0.002	0.000	0.000	0.006	0.021
<i>Coprobacter</i>	0.002	0.001	0.001	0.002	0.016	0.978
<i>Pseudoflavonifractor</i>	0.002	0.011	0.001	0.004	0.039	0.870
<i>Sporobacter</i>	0.002	0.002	0.001	0.002	0.005	0.316
<i>Lachnobacterium</i>	0.002	0.001	0.002	0.001	0.010	0.870
<i>Intestinimonas</i>	0.002	0.002	0.002	0.003	0.010	0.752
<i>Clostridium IV</i>	0.002	0.002	0.002	0.002	0.067	0.978
<i>Faecalicoccus</i>	0.001	0.001	0.000	0.000	0.007	0.133
<i>Mobilitalea</i>	0.001	0.001	0.000	0.000	0.005	0.051
<i>Anaerorhabdus</i>	0.001	0.001	0.001	0.000	0.010	0.376
<i>Saccharibacteria</i>	0.001	0.001	0.001	0.001	0.007	0.997
<i>Anaerocella</i>	0.001	0.001	0.001	0.000	0.007	0.455
<i>Ethanoligenens</i>	0.001	0.000	0.001	0.001	0.010	0.870
<i>Roseburia</i>	0.001	0.001	0.001	0.001	0.005	0.997
<i>Mogibacterium</i>	0.001	0.001	0.000	0.001	0.006	0.453
<i>Saccharofermentans</i>	0.001	0.001	0.001	0.000	0.007	0.752
<i>Vampirovibrio</i>	0.001	0.001	0.001	0.001	0.007	0.870
<i>Candidatusendomicrobium</i>	0.000	0.001	0.000	0.000	0.010	0.978
<i>Streptococcus</i>	0.000	0.000	0.001	0.001	0.010	0.316

<i>Catabacter</i>	0.000	0.000	0.000	0.000	0.005	0.978
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Animals were split into quartiles depending on outset acetate concentrations as follows: Quartile 1, n = 4, 9.45mM $\pm$ 0.27 (mean $\pm$ SD); Quartile 2, n = 4, 11.66mM $\pm$ 1.04, Quartile 3, n = 3, 16.76mM $\pm$ 1.13, Quartile 4, n = 4, 22.63mM $\pm$ 4.49. ANOVA analysis was employed to evaluate group differences in the relative abundance of bacterial genera, and the resulting P-values were adjusted for multiple testing using the Benjamini-Hochberg correction.