Figure S1. Megan 4 Analysis. Pylogenetic diveristy index average over 12 samples per timepoint and treatment.
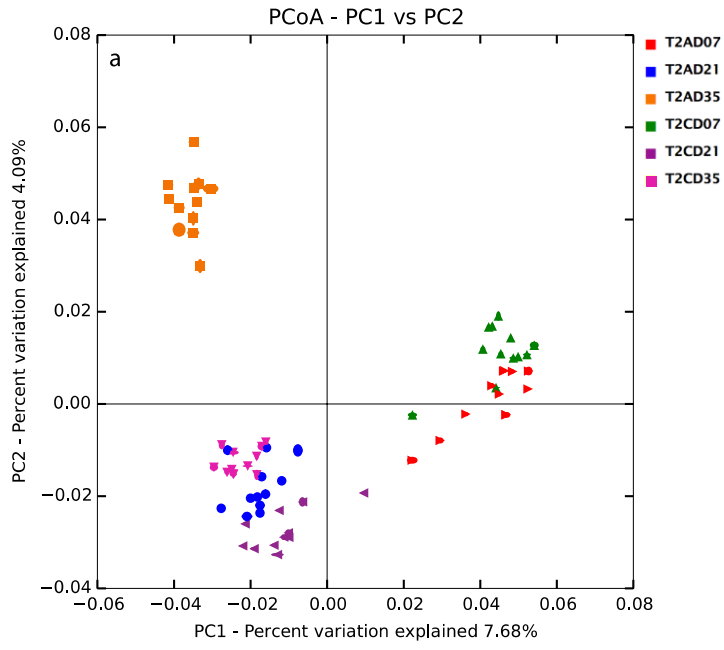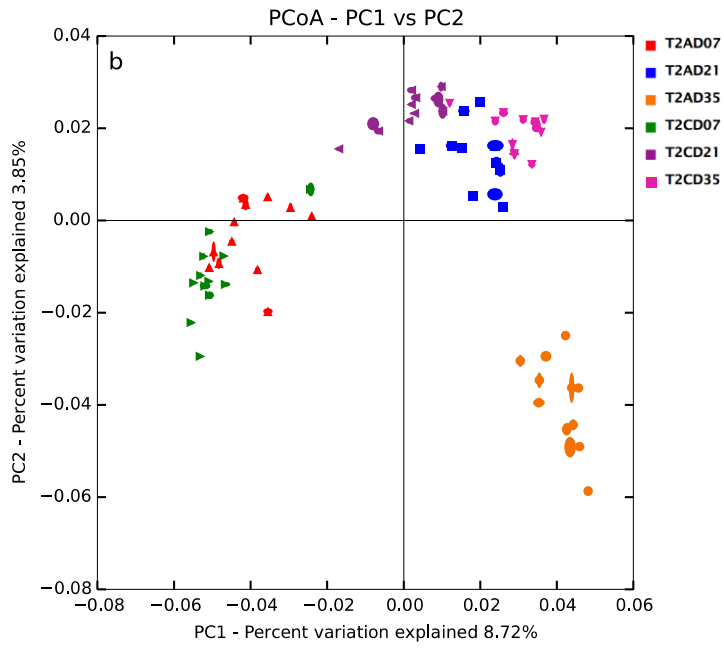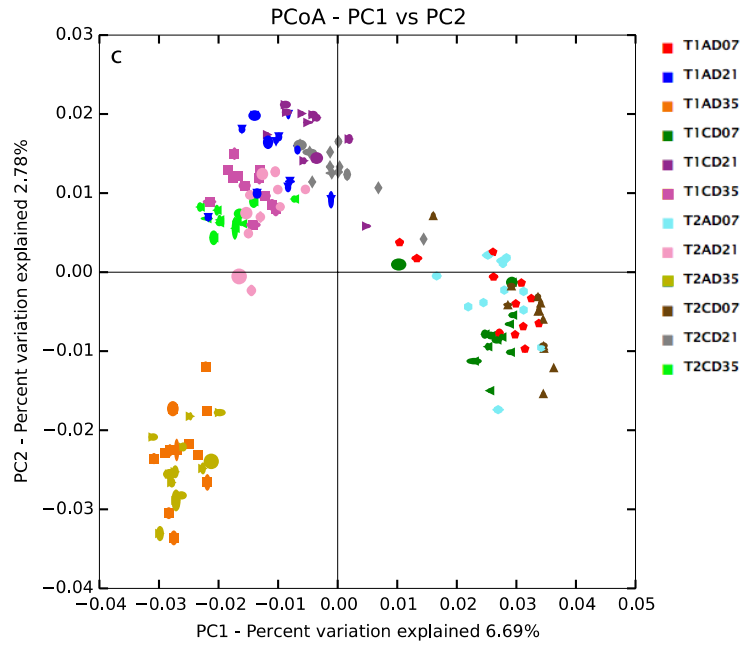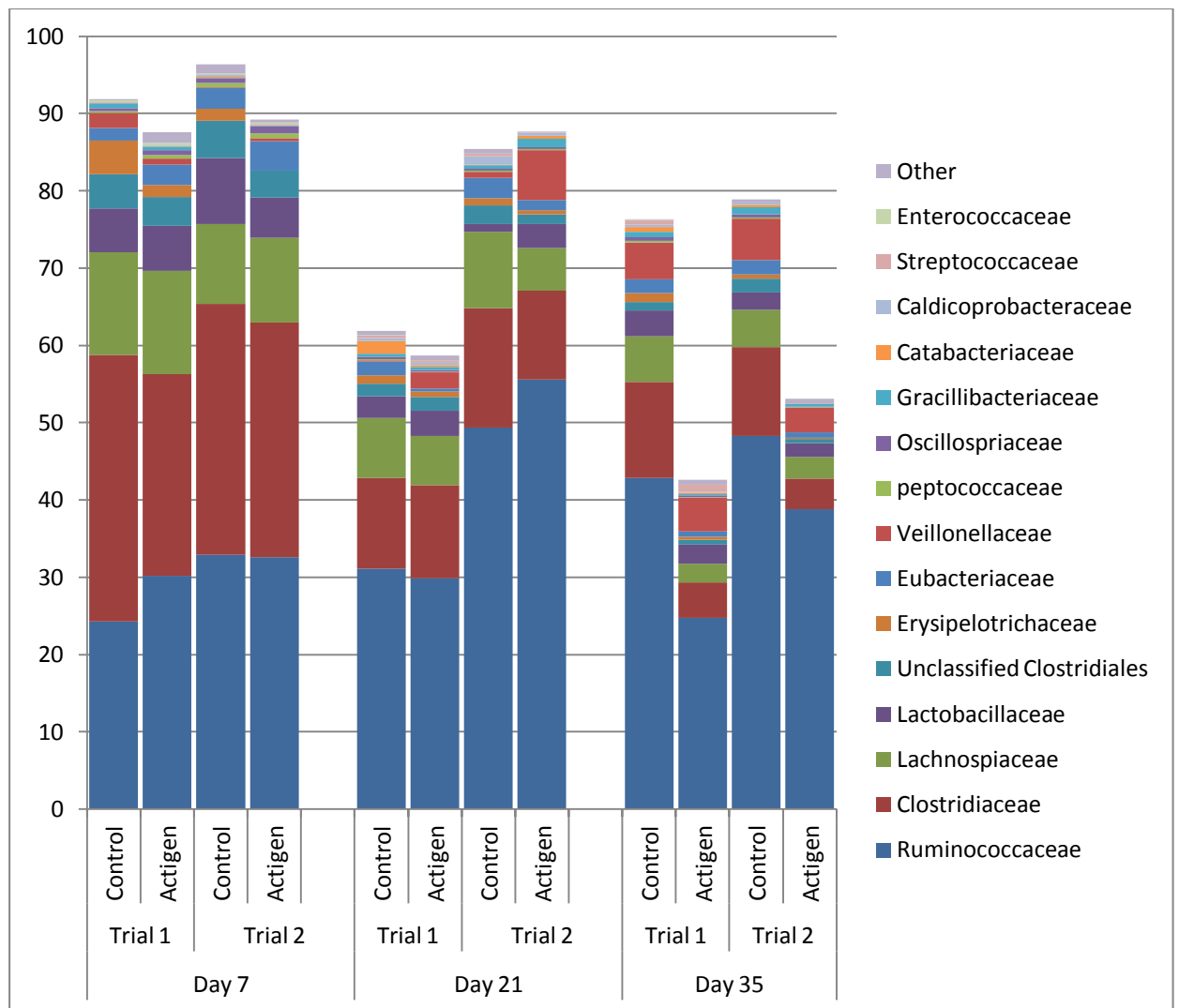
4

5

PCoA - PC1 vs PC2

6

Figure S2 (a-c). PCA analysis (a= Trial 1, b=Trial 2, c=Trial 1 and Trial 2 combined)

was performed on pairwise distance estimates obtained from Unweighted Unifrac

analysis to assess for differences between Timepoints (D07 = day 7, D21 = day 21 and

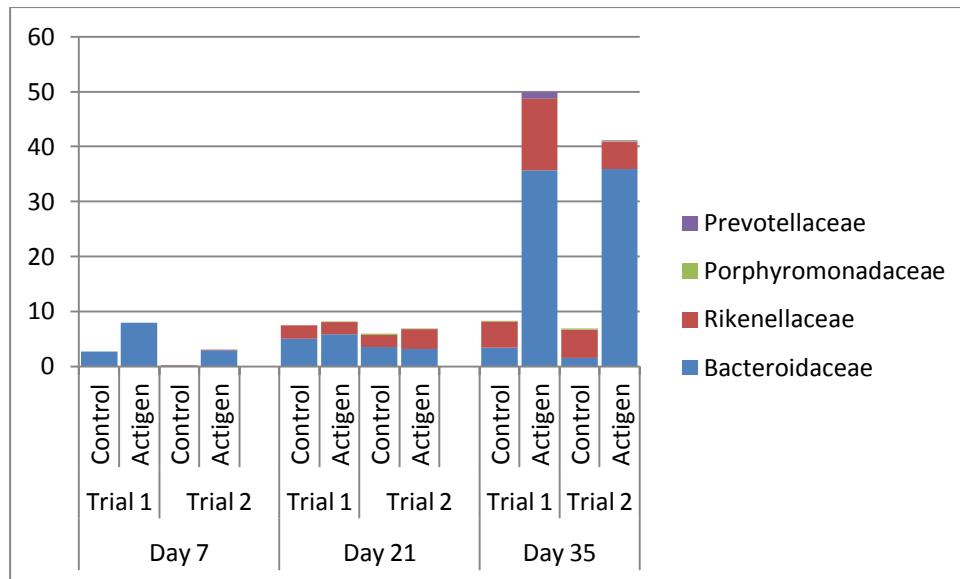D35 = day 35 posthatch) and Treatment (A = Actigen, C = Control).

Figure S3. Bacterial Family level distribution (percentage) within Firmicutes phylum at each timepoint in control and supplemented groups for both Trial 1 and Trial 2, (n=12 for each treatment per timepoint).
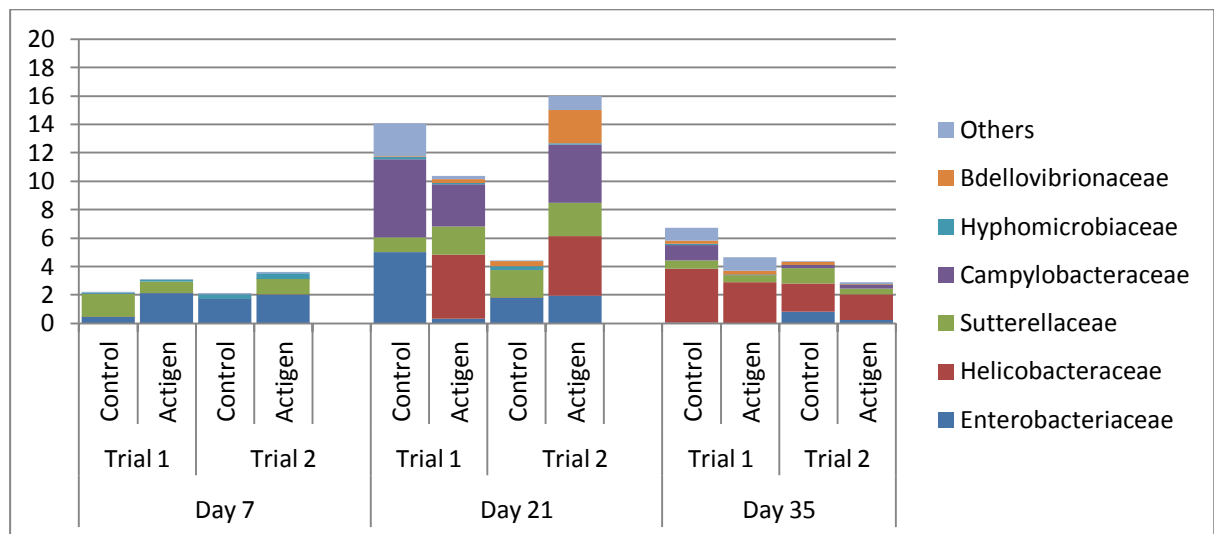
Figure S4. Bacterial Family level distribution (percentage) within Bacteroidetes phylum at each timepoint in control and supplemented groups for both Trial 1 and Trial 2, (n=12 for each treatment per timepoint).

Figure S5. Bacterial Family level distribution(percentage) within Proteobacteria phylum at each timepoint in control and supplemented groups for both Trial 1 and Trial 2, (n=12 for each treatment per timepoint).