**Supplementary Table S4.** Mean relative abundances of bacterial genera in ruminal samples of sheep when fed a concentrate with different doses of spent coffee grounds

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Genus** | **Treatmenta** | | | | **SEM** | **P-value** | |
|  | **Control** | **3** | **5** | **10** |  | **Linear** | **Quadratic** |
| *Prevotella1* | 56.3 | 54.1 | 56.2 | 44.3 | 8.10 | 0.004 | 0.153 |
| UG\_Ruminococcaceae1 | 5.95 | 6.46 | 6.49 | 9.78 | 2.474 | 0.002 | 0.214 |
| UG\_Clostridiales1 | 4.29 | 5.48 | 5.33 | 7.70 | 1.961 | 0.001 | 0.621 |
| UG\_Lachnospiraceae1 | 7.81 | 6.06 | 6.23 | 6.86 | 2.471 | 0.586 | 0.155 |
| UG\_Coriobacteriaceae2 | -1.54 | -1.85 | -1.78 | -1.86 | 0.623 | 0.387 | 0.547 |
| UG\_Bacteroidales3 | 2.70 | 3.35 | 3.19 | 3.59 | 0.572 | 0.006 | 0.368 |
| UG\_BS112 | -2.93 | -2.16 | -2.11 | -0.607 | 1.2041 | <0.001 | 0.681 |
| UG\_BF3113 | 0.455 | 0.711 | 0.674 | 0.937 | 0.3753 | 0.016 | 0.810 |
| UG\_RF161 | 0.562 | 1.06 | 0.742 | 0.632 | 0.3582 | 0.759 | 0.032 |
| UG\_S24\_73 | 0.616 | 0.572 | 0.463 | 0.743 | 0.2607 | 0.296 | 0.079 |
| UG\_Paraprevotellaceae3 | 0.773 | 0.867 | 0.916 | 0.903 | 0.2426 | 0.294 | 0.414 |
| UG\_CF2314 | 3.08 | 3.03 | 4.13 | 1.96 | 1.484 | 0.144 | 0.043 |
| UG\_YRC221 | 1.50 | 2.10 | 1.47 | 1.54 | 0.880 | 0.757 | 0.504 |
| *Anaerostipes2* | -1.95 | -2.17 | -1.81 | -1.82 | 0.795 | 0.579 | 0.837 |
| *Butyrivibrio2* | 0.621 | 0.502 | 0.524 | 0.828 | 0.4221 | 0.235 | 0.196 |
| *Coprococcus2* | -1.60 | -1.38 | -1.49 | -1.78 | 0.548 | 0.357 | 0.247 |
| *Pseudobutyrivibrio2* | -1.55 | -2.10 | -2.26 | -2.41 | 0.910 | 0.068 | 0.374 |
| *Shuttleworthia2* | 0.422 | 0.376 | 0.377 | 0.329 | 0.1339 | 0.168 | 0.890 |
| *Ruminococcus2* | 0.091 | -0.211 | 0.060 | 0.088 | 0.2848 | 0.560 | 0.174 |
| *Anaerovibrio2* | -1.06 | -1.84 | -1.62 | -2.16 | 0.662 | 0.004 | 0.426 |
| *Selenomonas1* | 0.416 | 0.264 | 0.203 | 0.155 | 0.1218 | <0.001 | 0.071 |
| UG\_Mogibacteriaceae2 | -1.56 | -1.71 | -1.93 | -1.11 | 0.491 | 0.046 | 0.009 |
| UG\_Victivallaceae2 | -0.215 | -0.515 | -0.596 | -1.18 | 0.6499 | 0.004 | 0.799 |
| *Desulfovibrio2* | -1.35 | -1.63 | -1.66 | -1.72 | 0.797 | 0.373 | 0.610 |
| *Treponema3* | 1.31 | 1.44 | 1.47 | 1.74 | 0.471 | 0.062 | 0,831 |
| *Anaeroplasma2* | -2.97 | -2.53 | -1.56 | -1.74 | 1.091 | 0.017 | 0.191 |
| UG\_RFP122 | -0.206 | -0.366 | -0.548 | -1.11 | 0.5084 | <0.001 | 0.526 |

aControl concentrate; 3, 5 and 10, treatment groups supplemented with 30 g/kg, 50g/kg and 100 g/kg of spent coffee grounds in the concentrate, respectively; 1Untransformed data, 2Ln transformation, 3 square root transformation, 4 reciprocal transformation; SEM: standard error of the mean; UG: undefined genera.