**Supplementary Table S3**. Mean relative abundances of bacterial families in ruminal samples of sheep when fed a concentrate with different doses of spent coffee grounds

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Family** | **Treatmenta** | | | | **SEM** | **P-value** | |
|  | **Control** | **3** | **5** | **10** |  | **Linear** | **Quadratic** |
| Prevotellaceae1 | 56.3 | 54.1 | 56.2 | 44.3 | 8.10 | 0.004 | 0.153 |
| Lachnospiraceae1 | 10.8 | 8.6 | 8.9 | 10.2 | 3.083 | 0.867 | 0.109 |
| Ruminococcaceae1 | 7.28 | 7.42 | 7.67 | 11.0 | 2.368 | 0.001 | 0.129 |
| UF\_Bacteroidales1 | 7.96 | 11.5 | 10.4 | 13.0 | 3.405 | 0.009 | 0.541 |
| UF\_Clostridiales1 | 4.29 | 5.48 | 5.33 | 7.70 | 1.961 | 0.001 | 0.621 |
| Paraprevotellaceae1 | 2.82 | 3.41 | 2.68 | 3.15 | 1.261 | 0.781 | 0.984 |
| Coriobacteriaceae2 | -1.50 | -1.80 | -1.74 | -1.75 | 0.603 | 0.487 | 0.450 |
| BS112 | -2.93 | -2.16 | -2.11 | -0.61 | 1.204 | <0.001 | 0.681 |
| Bacteroidaceae3 | 0.469 | 0.721 | 0.679 | 0.943 | 0.3674 | 0.016 | 0.833 |
| RF161 | 0.562 | 1.06 | 0.742 | 0.632 | 0.3582 | 0.759 | 0.032 |
| S24-73 | 0.616 | 0.572 | 0.463 | 0.743 | 0.2607 | 0.296 | 0.079 |
| UF\_Endomicrobia2 | -2.38 | -2.44 | -2.71 | -2.89 | 0.692 | 0.105 | 0.966 |
| Clostridiaceae1 | 0.222 | 0.256 | 0.237 | 0.290 | 0.1094 | 0.238 | 0.874 |
| Veillonellaceae3 | 0.951 | 0.724 | 0.697 | 0.626 | 0.1517 | <0.001 | 0.050 |
| Mogibacteriaceae2 | -1.30 | -1.48 | -1.69 | -0.903 | 0.5040 | 0.084 | 0.010 |
| Victivallaceae2 | -0.215 | -0.515 | -0.596 | -1.18 | 0.6499 | 0.004 | 0.799 |
| Desulfovibrionaceae2 | -1.29 | -1.55 | -1.60 | -1.58 | 0.774 | 0.492 | 0.531 |
| Xanthomonadaceae2 | -1.46 | -3.00 | -3.96 | -4.59 | 0.863 | <0.001 | 0.011 |
| Spirochaetaceae3 | 1.32 | 1.45 | 1.47 | 1.75 | 0.472 | 0.063 | 0.834 |
| Anaeroplasmataceae2 | -2.97 | -2.53 | -1.56 | -1.73 | 1.092 | 0.017 | 0.194 |
| 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; SEM: standard error of the mean; UF: undefined family.