Table S2 Effect of dietary treatments on the *in vitro* rumen fatty acid composition

| Fatty acid, g/100g total FA | Treatment | SEM | *P*-value |
| --- | --- | --- | --- |
| CON | FUM | BIO | MEN | FB | FM | FBM | FUM | BIO | MEN | FB | FM | FBM |
| C14:0 | 3.89 | 3.75 | 4.01 | 3.56 | 3.73 | 3.41 | 3.32 | 0.329 | 0.121  | 0.873  | 0.020  | 0.564  | 0.885  | 0.860  |
| C15:0 | 3.74  | 3.53  | 3.94  | 3.38  | 3.61  | 3.32  | 3.29  | 0.298 | 0.113  | 0.457  | 0.035  | 0.527  | 0.735  | 0.747  |
| iso C15:0  | 8.03  | 7.93  | 8.33  | 7.64  | 7.64  | 7.08  | 6.57  | 0.739 | 0.073  | 0.760  | 0.039  | 0.315  | 0.415  | 0.781  |
| C16:0 | 30.68  | 28.19  | 30.91  | 28.55  | 28.64  | 27.90  | 28.06  | 0.807 | <0.001 | 0.529  | 0.012  | 0.936  | 0.068  | 0.778  |
| iso C16:0  | 1.85  | 1.80  | 1.91  | 1.65  | 1.75  | 1.69  | 1.59  | 0.154 | 0.344  | 0.844  | 0.042  | 0.379  | 0.727  | 0.762  |
| trans-9 C16:1  | 0.59  | 0.59  | 0.62  | 0.53  | 0.61  | 0.58  | 0.53  | 0.042 | 0.945  | 0.748  | 0.032  | 0.242  | 0.769  | 0.156  |
| cis-9 C16:1  | 0.32  | 0.33  | 0.31  | 0.77  | 0.31  | 0.38  | 0.36  | 0.231 | 0.216  | 0.917  | 0.124  | 0.982  | 0.186  | 0.982  |
| iso C17:0  | 2.38  | 2.36  | 2.48  | 1.75  | 2.32  | 2.22  | 2.09  | 0.246 | 0.413  | 0.967  | 0.016  | 0.524  | 0.157  | 0.805  |
| C17:0 | 0.60  | 0.59  | 0.63  | 0.58  | 0.62  | 0.59  | 0.58  | 0.048 | 0.546  | 0.426  | 0.400  | 0.597  | 0.939  | 0.464  |
| C18:0 | 14.76  | 12.85  | 14.89  | 12.62  | 12.91  | 12.34  | 11.47  | 1.697 | 0.059  | 0.810  | 0.054  | 0.726  | 0.447  | 0.598  |
| trans-10 C18:1  | 0.44  | 0.48  | 0.52  | 0.50  | 0.48  | 0.49  | 0.50  | 0.065 | 0.688  | 0.332  | 0.375  | 0.312  | 0.545  | 0.971  |
| trans-11 C18:1 | 2.80  | 2.72  | 2.88  | 2.61  | 3.07  | 3.01  | 2.79  | 0.313 | 0.366  | 0.653  | 0.636  | 0.952  | 0.558  | 0.145  |
| cis-9 C18:1  | 9.03 | 10.9 | 8.68 | 11.1 | 11.0 | 11.5 | 11.9 | 0.966 | <0.001 | 0.942  | 0.002  | 0.479  | 0.085  | 0.768  |
| cis-11 C18:1  | 1.90  | 1.83  | 2.03  | 2.05  | 1.87  | 1.99  | 2.15  | 0.155 | 0.392  | 0.248  | 0.055  | 0.894  | 0.712  | 0.626  |
| cis-9,cis-12 C18:2  | 14.23  | 17.39  | 12.70  | 17.82  | 16.58  | 18.32 | 19.66 | 2.000 | 0.029  | 0.686  | 0.036  | 0.472  | 0.524  | 0.448  |
| trans-9,12,15 C18:3  | 3.69  | 3.76  | 4.03  | 3.96  | 3.85  | 4.31  | 4.34  | 0.408 | 0.709  | 0.367  | 0.046  | 0.505  | 0.546  | 0.889  |

CON, Control; FUM, Fumarate; BIO, Biotin; MON, Monensin; FB, FUM + BIO; FM, FUM + MON; FBM, FUM + BIO + MON; SEM, Standard error of means.