Supplementary table S1: Diets chemical composition from experiments A, B and C

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Experiment A | | | | | | Experiment B | | |  | Experiment C | | | |
|  | EGC1 | EGF | LGC | LGF | MSC | MSF | CON | RSC | WCR | RSO | WHE | WBU | MOL | MBU |
| DM2, g/kg fresh matter | 512 | 520 | 421 | 428 | 388 | 402 | 479 | 500 | 492 | 494 | 473 | 470 | 451 | 453 |
| Organic matter, g/kg DM | 908 | 915 | 922 | 924 | 948 | 949 | 934 | 937 | 939 | 939 | 939 | 925 | 903 | 897 |
| Starch3, g/kg DM | 43.1 | 43.6 | 43.1 | 43.6 | 141 | 137 | 130 | 121 | 123 | 125 | 243 | 257 | 7.6 | 3.7 |
| Sugar3, g/kg DM | 135 | 131 | 32.0 | 32.0 | 27.0 | 27.0 | 45.0 | 47.3 | 44.2 | 43.4 | 34.2 | 30 | 241 | 238 |
| NDF, g/kg DM | 304 | 299 | 407 | 391 | 355 | 337 | 332 | 328 | 326 | 322 | 318 | 290 | 280 | 277 |
| CP4, g/kg DM | 209 | 204 | 180 | 178 | 164 | 155 | 169 | 171 | 168 | 171 | 175 | 176 | 178 | 180 |
| Fat, g/kg DM | 37.4 | 64.2 | 30.5 | 58.3 | 34.3 | 61.9 | 35.0 | 55.0 | 62.0 | 65.0 | 25.8 | 24.4 | 16.5 | 16.7 |
| Fatty acids, g/kg DM | 29.0 | 53.3 | 23.1 | 47.3 | 28.7 | 55.4 | 26.0 | 43.0 | 50.0 | 53.0 | 17.0 | 17.0 | 11.0 | 11.0 |
| Gross energy, MJ/kg DM | 17.9 | 18.5 | 18.0 | 18.7 | 18.5 | 19.1 | 18.4 | 18.9 | 19.1 | 19.1 | 18.2 | 18.0 | 17.4 | 17.3 |

1Diets abbreviations: EGC = early grass silage, control concentrate (low fat), EGF = early grass silage, high-fat concentrate, LGC = late grass silage, control concentrate, LGF = late grass silage, high-fat concentrate, MSC = maize silage, control concentrate, MSF = maize silage, high-fat concentrate, CON = control (low-fat), RSC = rapeseed cake, WCR = whole cracked rapeseed, RSO = rapeseed oil, WHE = wheat-based concentrate, WBU = NaOH (buffer) treated wheat concentrate, MOL = molasses concentrate, MBU = molasses and bicarbonate (buffer) concentrate.

2DM = dry matter

3Starch and sugar contents in Experiments A and B were calculated from analyses of ingredients and analyzed directly for Experiment C

4CP = crude protein