**Supplementary Table 1. Nutrient composition of the glycine (GLY) inclusion level and feeding study diets.**

|  |  |  |  |
| --- | --- | --- | --- |
|  |   | GLY inclusion study | GLY feeding study |
| Nutrient  | Unit  | 0% free GLY (Control diet) | 0.5% free GLY  | 1.5% free GLY  | 6% free GLY  | 0% free GLY (Control diet)  | 1.5% free GLY |
| Energy  | kcal/g  | 3681  | 3653  | 3653  | 3679  | 3792 | 3815 |
| Moisture  | % as-fed  | 7.06  | 7.70  | 7.61  | 7.56  | 6.39 | 6.19 |
| Protein  | % as-fed  | 34.56  | 34.75  | 35.56  | 40.44  | 34.31 | 35.69 |
| Fat  | % as-fed  | 13.79  | 13.60  | 13.53  | 14.03  | 15.71 | 15.76 |
| Crude Fiber  | % as-fed  | 1.5  | 1.3  | 1.4  | 1.3  | 1.2 | 1.2 |
| Ash  | % as-fed  | 5.97  | 6.05  | 5.96  | 6.06  | 6.52 | 6.13 |
| Total GLY  | % as-fed  | 2.36  | 2.89  | 3.96  | 8.39  | 2.42 | 3.94 |
| Free GLY  | % as-fed  | 0.03  | 0.54  | 1.57  | 6.02  | 0.03 | 1.54 |
| Cystine\*  | % as-fed  | 0.42  | 0.43  | 0.43  | 0.42  | 0.41 | 0.42 |
| Methionine | % as-fed | 0.89 | 0.88 | 0.88 | 0.88 | 0.91 | 0.89 |

GLY, glycine.
\* a combination of cystine and cysteine.
Amino acids are total, unless otherwise stated.