Materials and Methods

Table 1. Composition and nutrient analysis of experimental diets

|  |  |  |
| --- | --- | --- |
| **Item** |  | **Diet** |
| ***Ingredients (%)*** |  | **Control** |  | **-225** |  | **-450** |
| Corn |  | 79.47 |  | 77.25 |  | 75.3 |
| Soybean meal |  | 16.64 |  | 16.8 |  | 16.95 |
| Dicalcium Phosphate |  | 2.15 |  | 2.15 |  | 2.15 |
| Ammonium Chloride |  | - |  | 0.965 |  | 1.815 |
| Soy Oil |  | - |  | 0.8 |  | 1.55 |
| Calcium Sulfate |  | - |  | 0.7 |  | 1.3 |
| Calcium Carbonate |  | 0.85 |  | 0.45 |  | 0.05 |
| Salt |  | 0.5 |  | 0.5 |  | 0.5 |
| Choline Chloride |  | 0.13 |  | 0.125 |  | 0.125 |
| Trace mineral premix |  | 0.11 |  | 0.112 |  | 0.112 |
| Base vitamin premix |  | 0.1 |  | 0.1 |  | 0.1 |
| Sow/Starter vitamin premix |  | 0.05 |  | 0.05 |  | 0.05 |
| ***Analyzed nutrient content (%)*** |  |  |  |  |  |  |
| Dry matter |  | 87.36±1.42 |  | 86.65±0.87 |  | 87.28±0.88 |
| NDF |  | 12.21±1.25 |  | 15.0±3.25 |  | 15.21±2.48 |
| ADF |  | 2.67±0.29 |  | 3.34±0.51 |  | 3.65±0.43 |
| Ash |  | 4.64±0.48 |  | 5.98±0.32 |  | 6.29±0.57 |
| N |  | 1.97±0.30 |  | 2.34±0.30 |  | 2.97±0.45 |
| CP |  | 12.33±1.90 |  | 14.61±1.88a |  | 18.57±2.81a |
| Fat |  | 1.67±1.09 |  | 2.04±0.74 |  | 2.59±0.91 |
| Ca |  | 1.08±0.16 |  | 1.23±0.12 |  | 1.12±0.14 |
| P |  | 0.54±0.20 |  | 0.53±0.06 |  | 0.49±0.08 |
| K |  | 0.36±0.14 |  | 0.39±0.09 |  | 0.48±0.05 |
| Na |  | 0.31±0.20 |  | 0.36±0.21 |  | 0.37±0.26 |
| S |  | 0.18±0.04 |  | 0.46±0.03 |  | 0.67±0.03 |
| a When the nitrogen provided by the ammonium chloride is taken into account, the CP is similar to control. |