**Table S1** Composition of the basal diets (%, as fed)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Grower | |  | Finisher | |
| Corn | Wheat |  | Corn | Wheat |
| Corn | 58.45 |  |  | 60.19 |  |
| Wheat |  | 68.16 |  |  | 70.88 |
| Soybean meal (43%) | 32.08 | 21.30 |  | 29.50 | 17.90 |
| Soybean oil | 5.00 | 5.80 |  | 5.70 | 6.40 |
| Limestone | 1.10 | 1.10 |  | 1.20 | 1.10 |
| Salt | 0.30 | 0.30 |  | 0.30 | 0.30 |
| CaHPO4 | 1.50 | 1.50 |  | 1.50 | 1.50 |
| L-Lysine HCl | 0.19 | 0.40 |  | 0.22 | 0.46 |
| DL-methionine | 0.28 | 0.25 |  | 0.29 | 0.26 |
| L-threonine | 0.10 | 0.19 |  | 0.10 | 0.20 |
| Premix1 | 1.00 | 1.00 |  | 1.00 | 1.00 |
| Choline chloride | 0.10 | 0.10 |  | 0.10 | 0.10 |
| Total | 100 | 100 |  | 100 | 100 |
| Calculated nutrient levels, % | |  |  |  |  |
| CP | 18.88 | 18.95 |  | 17.95 | 17.92 |
| Calcium | 0.82 | 0.89 |  | 0.85 | 0.89 |
| Total phosphorus | 0.60 | 0.65 |  | 0.59 | 0.64 |
| Available P | 0.37 | 0.37 |  | 0.37 | 0.37 |
| Lys | 1.01 | 1.01 |  | 0.98 | 0.98 |
| Met | 0.52 | 0.48 |  | 0.47 | 0.45 |
| Met + Cys | 0.78 | 0.78 |  | 0.76 | 0.76 |
| Thr | 0.71 | 0.71 |  | 0.68 | 0.68 |
| ME, Mcal/kg | 3.07 | 3.07 |  | 3.12 | 3.12 |

1Supplied per kilogram of diet: Glucose oxidase, 500 U; Phytase, 1,000 U; vitamin A, 15,000 IU; vitamin D3, 3,450, IU; vitamin E, 22.5 IU; vitamin K, 2.25 mg; thiamine (vitamin B1), 2.7 mg; riboflavin (vitamin B2), 8.4 mg; pyridoxine (vitamin B6), 4.86 mg; vitamin B12, 0.03 mg; niacin, 44.55 mg; folic acid, 1.47 mg; biotin, 0.18 mg; pantothenic acid, 16.56 mg; Cu, 8.5 mg; Fe, 102 mg; Zn, 72.76 mg; Mn, 97.34 mg; I, 0.48 mg and Se, 0.3 mg.