Supplement 1. Component and nutrition of experimental diet

| Ingredients | content (%) |
|---|---|
| **Basic diet ingredients** | |
| Corn | 73.00 |
| Full-fat soybean meal, puffed | 5.00 |
| Soybean meal, de-hulled | 15.30 |
| Fish meal | 2.00 |
| Soybean oil | 1.00 |
| L-Lysine (98%) | 0.39 |
| DL-Met (98%) | 0.04 |
| L-Thr (98%) | 0.12 |
| L-Trp (98%) | 0.02 |
| $CaHPO_4$ | 1.19 |
| Limestone | 0.66 |
| NaCl | 0.28 |
| Premix[a] (1%) | 1.00 |
| **Nutritional level[b]** | |
| NE（Mcal/kg） | 2.50 |
| Crude protein | 16.03 |
| Lysine | 0.98 |
| Methionine | 0.29 |
| Threonine | 0.60 |
| Threonine | 0.17 |
| Calcium | 0.66 |

| | |
|---|---|
| Total phosphorus | 0.56 |
| Available phosphorus | 0.33 |
| Sodium | 0.14 |
| Chlorine | 0.19 |

[a] Provided the following per kilogram of diet: 8, 000 IU Vitamin A; 2, 000 IU Vitamin $D_3$; 30 mg Vitamin E; 2 mg Vitamin $K_3$; 1.6 mg Vitamin $B_1$; 5.0 mg Vitamin $B_2$; 5.0 mg Vitamin $B_6$; 0.01 mg Vitamin $B_{12}$; 20 mg pantothenic acid; 0.01 mg folic acid; 0.05 mg biotin; 15 mg niacin; 140 mg Zn; 150 mg Cu; 160 mg Fe; 40 mg Mn; 0.4 mg I; 0.4 mg Se.

[b] Nutritional level were calculated value.