

**Table S1 Composition of experimental diets**

| <b>Basic diet ingredients</b>       | <b>Content, %</b> |
|-------------------------------------|-------------------|
| Corn                                | 73.00             |
| Soybean meal, de-hulled             | 15.30             |
| Full-fat soybean meal, puffed       | 5.00              |
| Fish meal                           | 2.00              |
| Soybean oil                         | 1.00              |
| L-Lysine                            | 0.39              |
| DL-Methionine                       | 0.04              |
| L-Threonine                         | 0.12              |
| L-Tryptophan                        | 0.02              |
| Calcium hydrogen phosphate          | 1.19              |
| Limestone                           | 0.66              |
| Salt                                | 0.28              |
| Premix <sup>1</sup>                 | 1.00              |
| <b>Nutrient levels <sup>2</sup></b> |                   |
| NE <sup>3</sup> , Mcal/kg           | 2.50              |
| Crude protein                       | 16.03             |
| Lysine                              | 0.98              |
| Methionine                          | 0.29              |
| Threonine                           | 0.60              |
| Leucine                             | 0.17              |
| Calcium                             | 0.66              |
| Total phosphorus                    | 0.56              |
| Available phosphorus                | 0.33              |
| Sodium                              | 0.14              |
| Chlorine                            | 0.19              |

<sup>1</sup> Provided the following per kilogram of diet: Fe, 160 mg; Cu, 150 mg; Mn, 40 mg; Zn, 140 mg; Se, 0.4 mg; I, 0.5 mg; vitamin A, 8,000 IU; vitamin D<sub>3</sub>, 2,000 IU; vitamin E, 30 mg; vitamin B<sub>1</sub>, 1.60 mg; vitamin B<sub>2</sub>, 5.00 mg; vitamin B<sub>6</sub>, 5.00 mg; vitamin B<sub>12</sub>, 0.01 mg; pantothenic acid, 20 mg; niacin, 15 mg; biotin, 0.05 mg.

<sup>2</sup> Nutrient levels were calculated values.

<sup>3</sup> NE: net energy.