Two experiments were conducted to evaluate the digestible energy (DE), metabolizable energy (ME), and standardized ileal digestibility (SID) of amino acids (AA) in dried yeast (DY) and soybean meal (SBM) fed to pigs. In Exp. 1, 30 barrows with an initial body weight (BW) of 20.7 ± 1.01 were assigned to 5 diets in a randomized complete block design with period and BW as blocking factors. A basal diet was prepared to contain corn, canola meal, and soybean oil as energy-contributing ingredients. Four additional diets were prepared by adding 5 or 10 g/kg DY or SBM at the expense of energy-contributing ingredients in the basal diet to estimate the DE and ME in test ingredients by regression analysis. On a dry matter basis, estimated DE and ME in DY were 4,022 and 3,352 kcal/kg, respectively, and those in SBM were 3,876 and 3,601 kcal/kg, respectively. There was no difference in estimated DE or ME between DY and SBM. In Exp. 2, 21 barrows with an initial BW of 20.0 ± 1.31 kg were assigned to 3 diets in a randomized complete block design with BW as a blocking factor. Two diets were prepared to contain DY or SBM as the sole source of nitrogen, and a nitrogen-free diet was prepared to determine the basal ileal endogenous losses of AA. The SID of AA, except for Gly and Pro, in SBM were greater (P < 0.05) than in DY. The SID of indispensable AA in DY ranged from 64.7% for Thr to 86.1% for Arg, whereas those in SBM ranged from 84.8% for Thr to 92.3% for Arg. In conclusion, energy values in DY were comparable with SBM, but the SID of most AA in DY were less than in SBM.

Keywords: amino acid, dried yeast, metabolizable energy

Table 1. Effect of fumonisin-contaminated corn on growth performance and serum sphinganine to sphingosine ratio of 9- to 28-kg nursery pigs

| Item       | 0 ppm | 7.2 ppm | 14.7 ppm | 21.9 ppm | 32.7 ppm | 35.1 ppm | SEM  | Probability, <  
|------------|-------|---------|----------|----------|----------|----------|------|-----------------  
| ADG, g     | 577   | 677     | 1016     | 993      | 974      | 978      | 10.4 | 0.011           0.18  
| ADFl, g    | 674   | 666     | 1010     | 974      | 978      | 978      | 18.6 | 0.051           0.77  
| G:F        | 0.667 | 0.672   | 0.668    | 0.658    | 0.648    | 0.648    | 0.0064 | 0.021           0.11  
| d 28 BW, kg| 28.1  | 27.7    | 27.8     | 26.8     | 26.6     | 26.6     | 0.42  | 0.001           0.41  
| Sa:So      | 1.00  | 1.00    | 1.14     | 1.40     | 1.40     | 1.40     | 0.088 | 0.001           0.36  
| d 28       | 0.55  | 0.77    | 0.93     | 1.42     | 1.58     | 1.58     | <0.146| 0.001           0.14  

1Average daily gain (ADG); average daily feed intake (ADFl); gain to feed ratio (G:F); body weight (BW); sphinganine (Sa); sphingosine (So); sphinganine to sphingosine ratio (Sa:So).
2Heterogeneity variance: 7.2 ppm (0.031), 14.7 ppm (0.073), 21.9 ppm (0.076), 32.7 ppm (0.067), and 35.1 ppm (0.146).

Keywords: corn, fumonisin, nursery pigs