APPARENT AND STANDARDIZED ILEAL DIGESTIBILITY OF AMINO ACIDS IN FEEDSTUFFS FOR BROILER CHICKENS

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**Background**

It is well known that information on digestibility of nutrients is important for the diet formulation.

**Objectives**

The objective was to evaluate the apparent (AID) and standardized ileal digestibility (SID) of amino acid (AA) in corn, wheat, soybean meal (SBM), canola meal (CM), and corn distillers dried grains with solubles (CDDGS) fed to broiler chickens.

**Materials and Methods**

The feedstuffs served as the sole source of AA in 5 experimental diets. An N-free diet was prepared to estimate basal endogenous losses of AA. A total of 960 male broiler chickens (Ross 308) at day-old received a starter diet from d 0 to 19. On d 19, all birds were allocated to the 6 dietary treatments with 8 blocks. After 4-d experimental period, all birds were euthanized and ileal digesta were collected.

**Results**

The AID of Lys and Met were 76.0 and 87.7% for corn, 70.0 and 79.9% for wheat, 89.4 and 88.9% for SBM, 76.6 and 86.6% for CM, and 62.7 and 85.0% for CDDGS, respectively. The respective SID values were 79.7 and 90.8% for corn, 72.9 and 82.8% for wheat, 90.1 and 90.6% for SBM, 77.4 and 87.8% for CM, 64.2 and 86.1% for CDDGS. The AID of total AA in corn and SBM was higher (P < 0.05) than other test ingredients, whereas, the SID value in corn, wheat, and SBM was higher than that in CM and CDDGS.

**Conclusions**

In conclusion, both AID and SID of AA varied by the source of feedstuffs and this information should be considered for feed formulation.

**Key words**: amino acid, broiler, crude protein, digestibility, ingredient