
194 Chemical composition and amino acid digestibility of soybean meal produced in the United States, China, Argentina, Brazil, or India.

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An experiment was conducted to compare chemical composition and standardized ileal digestibility (SID) of AA in soybean meal (SBM) from 5 countries when fed to growing pigs. Five sources of SBM from China, Argentina, Brazil, and the U.S., and 4 sources from India were included in diets where SBM was the sole source of AA. An N-free diet was also used. Twenty-five barrows (initial BW: 30.53 ± 1.73 kg) were fitted with a T-cannula in the distal ileum and allotted to a 25 × 8 Youden square design with 25 diets and 8 periods. Data were analyzed using Proc Mixed in SAS. The model to compare chemical composition of SBM included country as fixed effect and source within country as random effect and the model to analyze SID of AA included country as the fixed effect, and pig and period as random effects. Results indicate that the concentration of CP was greater ($P < 0.05$) in SBM from Brazil and India (49.3 and 49.5%) than in SBM from China, Argentina, or the U.S. (45.1, 46.7, and 47.3%), but SBM from the U.S. contained more ($P < 0.05$) indispensable AA than SBM from China or Argentina. Indian SBM contained more ($P < 0.05$) trypsin inhibitor units than SBM from other countries. A greater ($P < 0.05$) SID of most AA was observed in SBM from the U.S. compared with SBM from Brazil, Argentina, and India (Table 194). There was less ($P < 0.05$) variability in SID values for AA among sources of SBM from the U.S. or Brazil than among sources from Argentina, China, or India. In conclusion, the SID of AA in SBM is dependent on the country where the SBM is produced.

Key Words: amino acid digestibility, pigs,
soybean meal
doi: 10.2527/asasmw.2017.12.194