336 Effect of Drying Method of Ileal Digesta on the Digestibility of Crude Protein and Amino Acids By Pigs. L. V. Lagos*[,1], H. H. Stein[2], [1]*University of Illinois, Urbana, IL,* [2]*University of Illinois at Urbana-Champaign, Urbana, IL*

Two experiments were conducted to evaluate the influence of drying method (oven drying vs. freeze drying) on the composition of ileal digesta and the standardized ileal digestibility (SID) of CP and AA by pigs. Eight barrows (average BW: 13.82 kg; Exp. 1) and 18 barrows (average BW: 72.47 kg; Exp. 2) were equipped with a T-cannula in the distal ileum and used in experiments to determine SID of AA in 3 sources of soybean meal (Exp. 1) and in 2 sources of distillers dried grains with solubles (Exp. 2). In both experiments, ileal digesta were collected over 2 d following standard operating procedures after a 5-d adaptation period. At the conclusion of the experiments, 2 representative sub-samples were collected from pooled ileal digesta samples collected from each pig. One set of sub-samples was lyophilized and the other set was oven dried at 60^{0}C. Data were analyzed using the PROC MIXED of SAS. The final model only included the fixed effect of diet and drying method because the interaction between diet and drying method was not significant. Results indicated that the concentration of DM and total AA was greater ($P < 0.05$) in freeze dried samples than in oven dried samples in Exp. 1 (90.1 vs 86.4% and 14.1 vs. 11.1%, respectively) and in Exp. 2 (94.3 vs 90.1% and 12.2 vs. 8.2%, respectively). Therefore, the SID of AA was greater ($P < 0.05$) in oven dried samples than in freeze dried samples (Table 1). In conclusion, oven drying of ileal digesta samples results in loss of N and AA and therefore, in greater values for SID of AA compared with freeze dried samples.

Key Words: amino acid digestibility, drying method, pigs

Table 1. Effect of drying method on the standardized ileal digestibility (%) of AA

	Exp. 1				Exp. 2			
Item	Freeze dried	Oven dried	SEM	*P*-value	Freeze dried	Oven dried	SEM	*P*-value
Arg	93.69	99.20	0.94	<0.001	88.41	94.82	1.50	<0.001
His	90.04	94.21	0.81	<0.001	80.89	91.53	0.87	<0.001
Ile	89.41	91.33	0.81	0.002	80.17	85.20	1.28	0.001
Leu	89.07	91.90	0.85	<0.001	86.93	90.62	0.88	<0.001
Lys	80.57	88.23	1.86	<0.001	72.86	84.27	1.69	<0.001
Met	91.76	94.81	0.74	<0.001	85.25	89.52	0.95	<0.001
Phe	89.35	93.00	0.76	<0.001	83.65	90.66	1.04	<0.001
Thr	86.87	93.98	1.24	<0.001	74.34	81.76	1.34	<0.001
Trp	92.18	98.86	0.75	<0.001	79.85	81.64	1.18	0.258
Val	88.09	91.46	1.01	<0.001	79.33	83.03	1.24	0.004