

indigestible indexes. A washout diet with no indigestible index was provided ad libitum to the pigs for 7 d before each 9-d experimental period. The SBM and N-free diets were provided at daily levels of 3 times the estimated maintenance requirement for energy. Equal meals were provided at 0800 and 2000 h. Ileal digesta samples were collected from 0800 to 1600 h on each day during both experimental periods. In pigs fed the SBM diet, the break point for Cr, Ti, and AIA was 2.7 (SE = 0.6, $P < 0.001$), 2.4 (SE = 0.4, $P < 0.001$), and 3.8 d (SE = 1.8, $P = 0.091$), respectively, based on one-slope broken-line analysis. In pigs fed the N-free diet, the break point for Cr, Ti, and AIA was 2.5 (SE = 0.6, $P = 0.001$), 2.4 (SE = 0.5, $P = 0.002$), and 2.3 d (SE = 0.6, $P = 0.021$), respectively. Sum of squares of error term in quadratic broken-line models were not less than in one-slope broken-line models. Based on the present results, we suggest that at least 3 d of adaptation period is required before initiating digesta collection in ileal digestibility experiments using chromium oxide or titanium dioxide as an indigestible index and that at least 4 d of adaptation is required with Celite as an index. Further research is warranted to determine minimum adaptation periods for consistent ileal nutrient digestibility values.

Key Words: acid insoluble ash, chromium, titanium
doi:10.2527/asasann.2017.425

425 Time course of indigestible indexes in the ileal out flow of pigs fed a soybean meal-based or nitrogen-free diet. B. G. Kim¹, K. R. Park^{*1}, and H. H. Stein²,

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The use of indigestible index is inevitable in ileal nutrient digestibility experiments due to the difficulties in quantitative collection of ileal digesta. A sufficient adaptation period before the initiation of ileal digesta collection is critical for accurate determination of ileal nutrient digestibility. The objective of this experiment was to identify the minimum adaptation period in ileal digestibility experiments using Cr, Ti, and acid insoluble ash (AIA) as indigestible indexes. Eight barrows with an initial BW of 58.1 kg (SD = 4.3) fitted with a T-cannula in the distal ileum were randomly allotted to a 2-period crossover design with 2 diets and 8 pigs in each period. The animals were housed in individual pens equipped with a feeder and a nipple drinker. A soybean meal (SBM)-based diet and an N-free diet were prepared. Both experimental diets contained 0.4% chromium oxide, 0.4% titanium dioxide, and 0.4% Celite (a source of AIA) as