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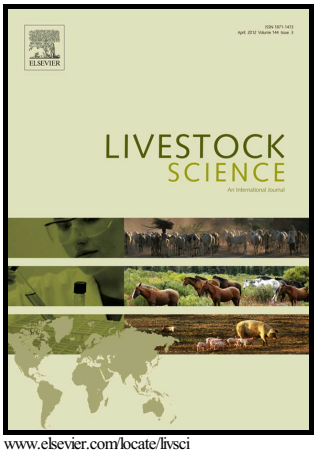

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Net energy levels of reduced crude protein, amino acid-supplemented diets for heavy pigs

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ABSTRACT

This study aimed to investigate the effects of different net energy (NE) levels of diets with reduced crude protein (CP) that were supplemented with amino acids on feeding behavior, performance and carcass characteristics of heavy pigs (100 to 130 kg). Pigs were randomly allocated to experimental groups under a randomized complete block design with initial body weight as the blocking criterion. There were 5 treatments (NE levels: 2300, 2388, 2475, 2563 and 2650 Kcal NE/kg, as-fed basis) with 13 pigs per treatment, and the animal was the experimental unit. The diets were based on corn, soybean meal and wheat bran. CP levels were similar between diets and approximately 2% below the requirement (13.9%). Pigs were weighed at the beginning and end of the experiment. Electronic feeder systems automatically recorded the visits to the feeders, the timing of meals, and the amount of feed consumed per meal. Based on these recorded data, daily feed intake was calculated and feeding behavior was evaluated. At the end of the experiment, the pigs were slaughtered for carcass evaluation. Net energy levels did not affect the average daily feed intake ($P > 0.05$) but did influence the feeding behavior of the pigs. The pigs fed the 2388, 2475 and 2563 kcal NE/kg diets had fewer ($P < 0.05$) daily meals than those fed the 2300 and 2650 kcal NE/kg diets. Thus, these animals occupied the feeders for less time daily ($P < 0.05$) compared to