137 Fresh belly characteristics and commercial bacon slicing yield in growing-finishing pigs fed an antibiotic-free diet or a diet supplemented with a natural antimicrobial. J. E. Lowell*, B. M. Bohrer, K. B. Wilson, M. F. Overholt, B. N. Harsh, H. H. Stein, A. C. Dilger, D. D. Boler, *University of Illinois, Urbana.*

The removal of antibiotic growth promoters (AGP) from swine diets may change carcass composition and belly quality. Therefore, our objective was to compare belly quality and bacon processing characteristics of pigs fed diets containing AGP or a natural antimicrobial. Ninety-six barrows and 96 gilts (initial BW: 27.52 ± 3.98 kg) were used in a 2 × 3 factorial arrangement in a randomized complete block design. Pigs were placed in 2 equal blocks based on age and housed in 48 single-sex pens with 4 replications per treatment in each block. Pigs were allotted to pens based on initial BW. Pens were randomly assigned to 1 of 3 dietary treatments. Diets were identical except Diet 1 contained no additive (ABF), diet 2 (AGP) contained 0.045% of Tylan 40 premix, and diet 3 (ORG) contained 0.025% of oregano oil. Pigs were slaughtered at an average BW of 127.31 ± 10.18. Within each block, the 2 pens with the heaviest barrows and the 2 pens with the heaviest gilts were harvested a week earlier than pigs in the remaining pens to reduce the variation in slaughter weights among pigs as much as possible. Whole bellies were approximately 14.6% of chilled side weight, regardless of treatment. Bellies did not differ in length ($P = 0.43$), width ($P = 0.91$), thickness ($P = 0.11$), or flop ($P = 0.10$) among treatments. Iodine values were calculated, as an indication of fat quality. The iodine value of adipose tissue from pigs fed AGP was increased ($P = 0.04$) by approximately 3 units compared with pigs fed ABF or ORG diets. The PUFA:SFA of bellies from pigs fed AGP was approximately 0.05 units greater ($P < 0.01$) compared with bellies from pigs fed ABF or ORG diets. Bellies did not differ in pump uptake percentage ($P = 0.07$), cooked yield ($P = 0.10$), slice yield ($P = 0.35$), or slice count ($P = 0.50$) among treatments. Overall, feeding an AGP diet or a diet supplemented with a natural antimicrobial did not improve fresh belly characteristics, processing characteristics or commercial bacon slicing yields of growing-finishing pigs.

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