

Evaluation of growth performance, carcass characteristics, and meat quality of barrows, immunocastrated pigs and entire males

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The goals of the study were to compare performance, carcass and meat quality as well as to evaluate boar taint in the LM of barrows (B), immunocastrated pigs (IC), and entire males (EM). 36 pigs were blocked by BW (3 littermates/blocks) and assigned to B, IC and EM. From weaning to 107 kg BW, all pigs were group-penned and had ad libitum access to standard diets. The 2 IMPROVAC injections were applied to the IC at an average BW of 22 and 74 kg. Because ADG did not ($P>0.05$) differ between IC, EM and B (0.92, 0.88, 0.93 kg/d) but IC and EM consumed less ($P<0.05$) feed than B (191, 185, 202 kg). IC and EM were more ($P<0.01$) efficient than B (G:F: 0.42, 0.41, 0.39 g/g). Carcass leanness was greatest ($P<0.05$) in EM (57.5%) followed by IC (56.3%) and B (54.5%). Androstene concentrations were higher ($P<0.01$) in EM than IC and B (1.2, 0.2, 0.2 mg per g lipid of backfat) whereas skatole levels were higher ($P<0.05$) in both EM and IC than B (0.31, 0.08, 0.05 mg). Sensory scores by a trained panel for boar odor and flavor (from 1 = weak to 9 = strong) were lower ($P<0.01$) in the LM of B and IC than EM. B and EM had higher ($P<0.01$) shear force values in the LM compared to IC (3.7, 3.8, and 3.5 kg). Although carcasses of EM were leaner, the similar feed efficiency and especially the lower sensory scores for boar odor and flavor in the LM of IC, confirm that immunocastration might be the best alternative to avoid castration under anesthesia.