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Ban of castration – product quality matters

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Introduction

Stopping castration of pigs is increasingly, when animal welfare is considered. However, it is important to address the quality matters related to production of entire males.

Product Quality

A major problem is the risk of boar taint. Meat from some entire males develops an unpleasant flavour - boar taint - a smell and taste that is generally not accepted by consumers. Boar taint is perceived through a combination of odour, flavour and taste in pork and pork products during cooking and eating. Boar taint can largely be attributed to three compounds; androstenone, skatole and to a lesser extent indole. Castration reduces the content of androstenone and skatole in the carcass. Even though the three compounds cannot explain all variation in boar taint determined by a sensory panel or consumers, they are regarded as the main compounds.

Furthermore the carcass composition of entire males differs from gilts and castrates. The forepart is heavier and the ham is lighter. The higher meat content results in changes in lean/fat distribution, and the fat quality deviates; the fat in entire males is more unsaturated resulting in more soft fat, which for some products like bellies can cause quality problems. Another aspect is the rind quality. General entire males are more aggressive compared to gilts and castrates resulting in more skin damages due to fighting.

Conclusion

Given the meat industry will begin to produce entire males in large scale, the consequences for product quality have to be addressed. A method for sorting out the tainted carcasses is needed. Furthermore, possibilities of keeping the amount of tainted carcasses at a very low level have to be investigated. It is of the utmost importance that the rejected carcasses and meat can realize reasonable prices. Therefore, possibilities have to be examined of using meat from rejected carcasses for products in which the flavour would not have a negative influence on product acceptability, also have to be examined. Procedures for handling the more aggressive male pigs have to be developed and implemented.