

Sex neutralization of heavy pigs from Iberian Peninsula breeds: solutions and limitations

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This report gives an overview of the production system with Alentejano and Iberian swine breeds, the need for sexual neutralization of these pigs and the possible limitations related to the use of immunocastration (IC). The Alentejano (AL, in Portugal) and Iberian (IB, in Spain) pig breeds are genetically related and are produced under the same free-range system. For the certification of high grade dry-cured products like the 'Pata Negra' ham, the animals are slaughtered with an age of at least 14 months and a body weight range of 145-210 kg. During the fattening period pigs have access to acorns and grass from the Mediterranean forest. Until now the gonadectomy of both males (avoid boar taint and aggressive and sexual behaviour) and females (avoid mating by wild boars) is a common practice. The foreseen voluntary end of surgical castration (SC) without pain relief in the EU requires the use of alternatives in these swine breeds management. Taking into account that age and weight are key factors for the final products, the only options are SC with pain relief or IC. However, IC in these systems entails various difficulties and raise questions regarding effectiveness, practicability and effects. Studies in IB pig have shown that for females a 3 dose protocol starting before puberty is effective until the usual slaughter age, suppressing ovarian cyclicity. For males a 3 dose protocol is also needed but in this case the immunisation efficacy has been variable, although a 100% efficacy was recently reached with a protocol in which the 3rd dose was administrated before the acorn-feeding. The effects of IC on male meat quality seem limited, but no information is available regarding cured products. Also, no scientific studies on IC vaccine are available for AL breed. Further studies for protocol optimization and impact of IC on final high grade products from AL and IB pigs are needed.