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Session 21

Theatre 6

For good beef, gender is more important than breed

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Variable eating quality is a major factor in declining beef consumption. The relative accuracy of the Meat Standards Australia (MSA) prediction system, which uses carcass traits to guarantee consumer eating quality, was evaluated within Europe. The MSA model was developed on beef steers and females, so it was expected to predict bulls and dairy breeds less accurately. In total 6,852 muscle samples from 482 carcasses from France, Poland, Ireland and Northern Ireland were evaluated by untrained consumers, according to MSA protocols. The scores were combined to form a Meat Quality score (MQ4). Carcasses were MSA graded during processing. There were four breed categories; British beef breeds, Continental beef breeds, dairy breeds and crosses. The difference between the actual and the MSA predicted MQ4 scores were analysed using a linear mixed effects model including the effects; carcass hang method, cook type, muscle type, sex, country, breed category and post mortem ageing period, with animal identification, grader and kill group as random terms. As expected the predicted MQ4 of females and steers was more accurate than for bulls. Accuracy varied between breed categories, but only for a minority of muscles and the effects were often contradictory. Therefore in a European eating quality prediction system similar to MSA a separate adjustment for bulls is required. Any differences in breed category are already adequately explained by factors currently present in the MSA model.