water binding capacity), FOP and TEST values on different muscles. For the «best» 2-variable equations, which combine the pH24 of Adductor femoris (AF) or Biceps femoris (BF) and the subjective score for wetness, R was around 0.72. For the «best» 3-variable equations, where the same variables as above were combined with one FOP measurement, R was around 0.76. When using only pH24 or FOP measurements which can be taken without cutting the carcass R was around 0.68 and 0.72 with the best 2 and 3 variable prediction equations, respectively. A new «meat quality index» (MQI) was established on the basis of these results for use in progeny-testing stations: MQI was a 3-variable linear combination of pH24 of AF muscle, REF and TGW of BF muscle, and the correlation between MQI and TY was 0.718.

The "Hampshire effect" on the technological qualities of pork

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The aim of the experiment was to determine the technological properties of meat from Hampshire (H) pigs, as compared to good quality meat from Large White (LW) pigs and to exudative meat from halothane-positive (HP) Pietrain pigs. All H and LW pigs were halothane-negative (HN). In 129 females and castrated males (45 LW, 20 HN Pietrain, 27 HP Pietrain, 35 H) several quality characteristics were measured on raw meat and one ham was processed into cooked «Paris ham». Though pH was normal one hour post mortem in H pigs, which did not differ from LW pigs in this respects, pork from H pigs, especially females, showed a very low ultimate pH and the highest cooking loss in processing. However, meat was much less exudative when fresh and generally darker (reflectance measured at 630 nm) in H than in HP Pietrain pigs. A very low ultimate pH occurred in muscle from H pigs owing to a very high «glycolytic potential» (essentially glycogen content). It is proposed to use the term «Hampshire type» to denote meat whose qualitative inadequacies basically result from an abnormally lowered ultimate pH and to keep the term «PSE» to refer to meat whose exudative state comes from a too rapid pH fall in the first few instants following slaughtering.

Meat quality in four pig breeds: relationships with halothane sensitivity and plasma creatine phosphokinase activity

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The halothane test was applied, at 25-30 kg live weight, to 1 156 female pigs from four breeds: 365 Large White (LW), 244 French Landrace (FL), 397 Belgian Landrace (BL),