



IMPROVING PORK EATING QUALITY

PREDICTING THE EATING QUALITY OF PORK

Project Participants

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Problem

Reducing the variability in eating quality of Australian fresh pork remains a significant issue which needs to be addressed to improve consumer demand and satisfaction. Unlike the red meat sector, the Australian pork industry has not yet developed a non-prescriptive, pathway-based eating quality model which can be applied to different cut and cooking method combinations to improve its acceptability and consistency.

Project

The project assessed whether data compiled from published studies could be used to help determine the factors that affect the pork eating quality of different cuts. This information was used to determine an eating quality system to manage and carefully control key production, processing, post-slaughter and cooking factors which influence eating quality and differentiate Australian pork in the global market.

Value for Producers

Improving the eating quality of Australian pork will ensure consumers have a positive pork eating experience and also secure the place of Australian pork in the global market.



Recommendations

On farm:

To minimise risk of boar taint and the resulting consumer acceptability issues, pork should not be sourced from entire male pigs. Immunocastration of entire male pigs is an alternative option to physical castration for producers to consider for the management of entire male pigs.

Pigs can be fed diets containing different dietary ingredients (eg. corn/soy, wheat/canola, sorghum/barley) without resulting in adverse effects on eating quality.

During loading, transport, and unloading:

Before, during and immediately after transport is a stressful time for pigs due to the unfamiliar environment, lack of access to food and water, movement of the vehicle, and mixing of unfamiliar pigs. Stress can affect pork quality and as such, it is important to ensure best practice handling by stockpeople during these times, and to minimise other stressors where possible.

At processing:

Ageing of pork is not effective in improving eating quality and should not be included in an eating quality system, unlike beef and sheep meat eating quality systems, until further investigations are conducted to understand and address those factors that are limiting post-mortem tenderisation of pork.

Pigs slaughtered at an average of 110 kilograms liveweight at 24 weeks of age could be eligible for inclusion in an eating quality system as eating quality was not affected. Intramuscular fat did not increase as liveweight at slaughter increased up to 110 kilograms liveweight.

The use of post-slaughter intervention such as moisture infusion of pork cuts increased eating quality scores.

At home:

Consumers should cook loin steaks and stir fry cuts at 70 degrees Celsius and all roast cuts at up to 75 degrees Celsius to ensure juiciness and eating quality is not compromised.

More Information

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