SENSORY TESTS OF DIFFERENT PIG PRODUCTION SYSTEMS IN EUROPE

BRAZIL | 2024 ICoMST 70th International Congress of Meat Science and Technology Responsible meat production

Marchen Hviid, Marlene Groenbeck, Lene Meinert

AIM

To analyze the sensory quality of fat and meat from pigs raised in different production systems that differ in husbandry conditions (space – enrichment), breed combinations, feeding regimes and slaughter methods.

CONCLUSION

The sensory tests contribute to the understanding of the differences between meat from pigs reared in different production systems. The sensory tests of fat and meat prepared separately, but served together, provided some new nuances to the overall understanding of the eating quality of meat from different production systems.

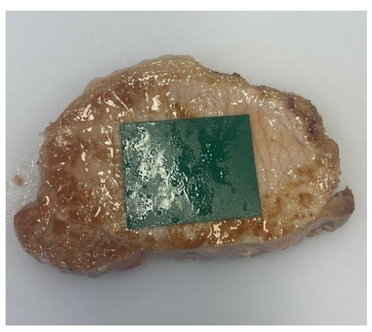
METHOD AND EXPERIMENTAL DESIGN

Samples

- 7 treatments (~140 samples)
- The meat and fat were cooked separately
- The meat and fat from the same animal were served together

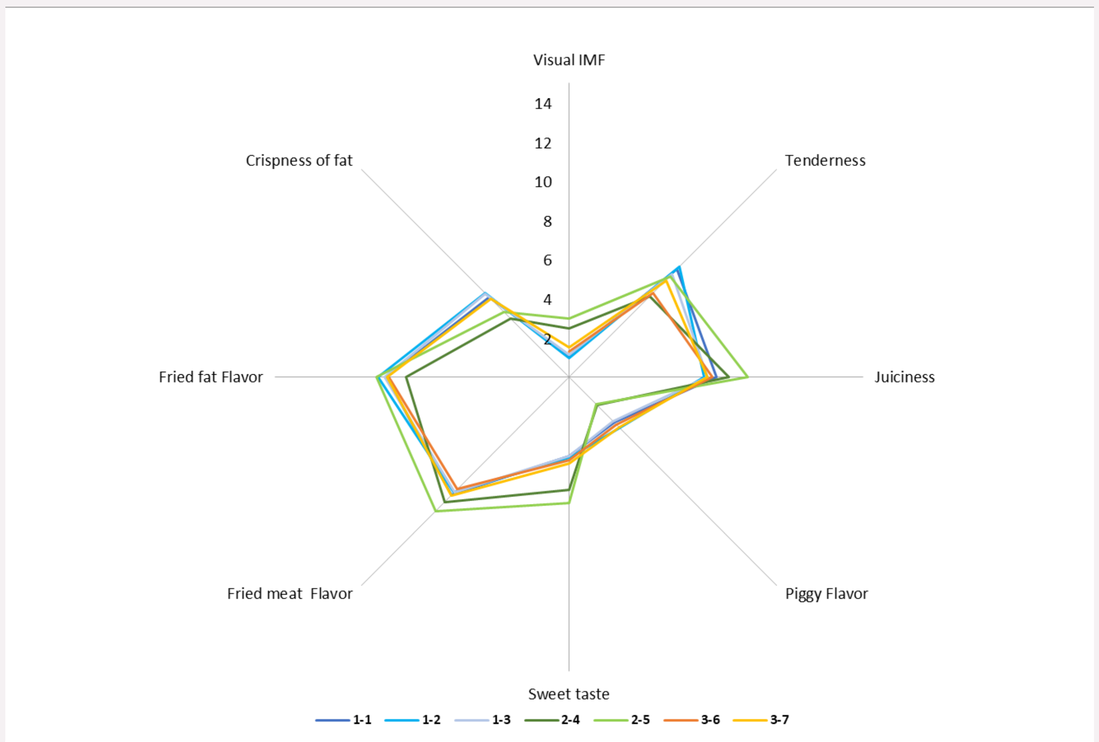
Descriptive analysis

- 10 trained panelists - 15 cm intensity line scale
- 8 hours of training
- 35 attributes (25 on meat and 10 on fat)



RESULTS

The 7 production systems represented a total of 3 control systems (one from each country) and 1-2 experimental treatments per country. The attributes hardness, chewing time and tenderness were highly correlated, as were the attributes describing taste and/or smell. The difference between the 7 systems were small and without a clear separation. The systems from country 2 differ from the other two countries, primarily in terms of fat quantity. The spiderweb shows the most important differences. More intense sweet taste led to a lower intense piggy flavor.



ACKNOWLEDGEMENTS

The project has received funding from the European Union's Horizon 2020, Research and Innovation Program under Grant Agreement No. 101000344.

Marchen Hviid
Senior Scientist
M mahd@teknologisk.dk
T +45 72 20 20 00

Gregersensvej 9
DK-2630 Taastrup
Tel. +45 72 20 20 00
www.DMRI.COM

mEAT quality

Food innovation for the future

DANISH TECHNOLOGICAL INSTITUTE