Sensory traits of boar's loins from two halothane genotypes (NN, nn) and diet supplements (magnesium and/or tryptophan)

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CONCLUSIONS

Meat from NN and nn boars was sensory different, but there were not important sensory differences among meats from animals fed the different supplements studied.

1. INTRODUCTION

Boar taint has been related to the presence of androstenone and skatole adipose tissue of entire male pigs. This work was performed with entire male pigs with the aim of assessing the relationship of the halothane genotype (sensitive and resistant to the stress) and diet supplements (magnesium and/or tryptophan-Trp) to the sensory traits of the meat assessed by 10 trained panellists.

2. OBJECTIVE

To compare sensory traits of meat from entire male pigs, from two different halothane genotypes (NN and nn) and different diet supplements.

3. MATERIALS & METHODS

Entire male pigs feed *ad libitum*

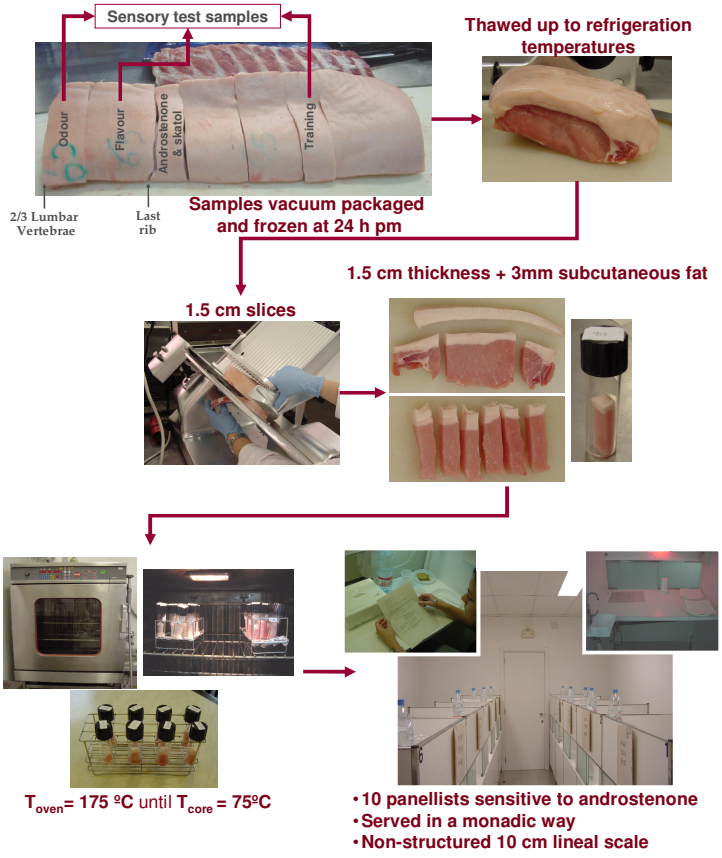
2 halothane genotypes: NN (n=28) and nn (n= 21)

3 diets 5 days before slaughter: Control: Standard diet
Mg&Trp: 0.40% $MgSO_4$ + 0.70% L-Trp
Trp: 0.77 % L-Trp

Same *ante mortem* treatment
Data analysis: **Generalized Procrustes Analysis**

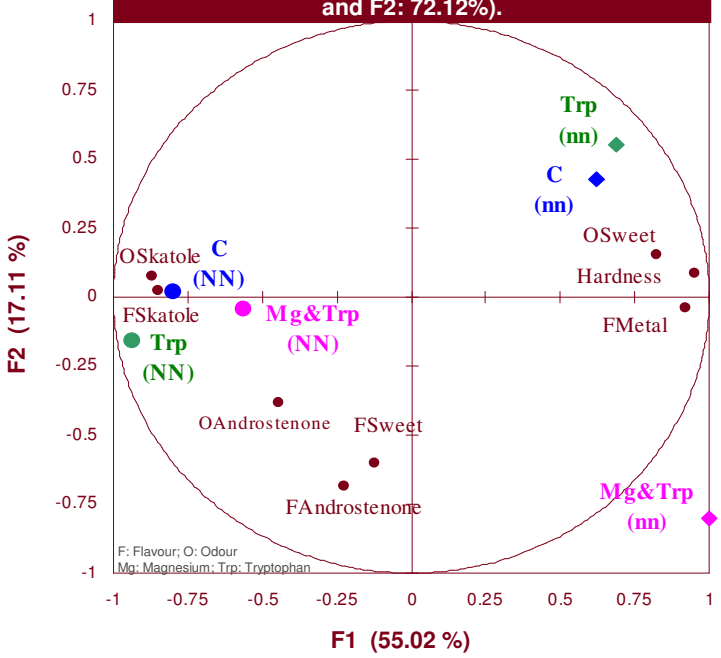
SENSORY ATTRIBUTES EVALUATED	
ODOUR:	androstenone, skatole, sweet
FLAVOUR:	androstenone, skatole, sweet, metal
TEXTURE:	hardness

SENSORY TEST METHODOLOGY



4. RESULTS

Figure. Projection of the sensory attributes in the plane defined by two first principal components (F1 and F2: 72.12%).



1st dimension (55.02 %)

related to **Hardness**, **Sweet** odour and **Metal** flavour on one side and **skatole** odour and flavour on the other.

oppositely located

NN	Related to **odour** and **flavour's skatole** No discrimination among diets
nn	Related to **hardness**, **sweet odour** and **metal flavour** No discrimination among diets

2nd dimension (17.11 %)

related to **Androstenone** and **Sweet flavour**

NN	No discrimination among diets
nn	**C** and **Trp** were oppositely located to **Mg&Trp**

This study is part of a wider project which aimed to assess the effect of magnesium and/or tryptophan as a tranquilizers on the behaviour and meat quality of pigs.

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