



# Effect of housing system and slaughter strategy on stress physiology, skin lesions and boar taint in entire male pigs

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## Conclusions

The influence of housing system or slaughter strategy on salivary cortisol, skin lesions or androstenone and skatole levels was not notorious in the present study. The risk of boar tainted carcasses was not reduced up to the same extent as with surgical castration.

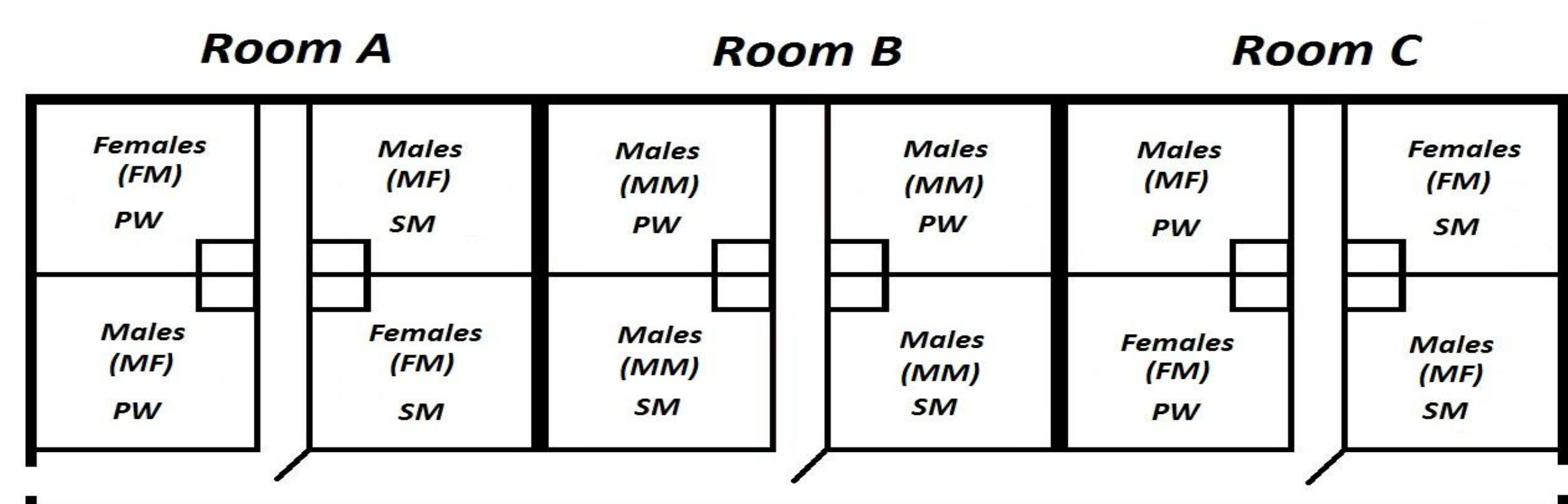
## Introduction

Entire male pig production has been considered an alternative system to surgical castration in piglets, but welfare of those pigs kept in these systems and slaughtered at heavy weights and meat quality (no boar taint) should be guaranteed.

*'The main goal of this study was to evaluate the effect of different entire male housing systems (HS) and slaughter strategies (SS) on physiological and welfare indicators and boar taint.'*

## Materials and Methods

- 120 (LWxLD) x Duroc piglets (80 entire males)
- Visual contact (MF) or not (MM) between males and females
- 3 saliva samples (90 days age, day before slaughter, after split marketing)
- Skin lesions recorded three times according to Welfare Quality®
- Slaughter penwise (PW) or by split marketing (SM) at 120kg
- Androstenone and skatole levels measured in melted fat



## Results

### 1 Cortisol levels (ng/ml) in saliva for the entire males with gilt visual contact (MF) and without (MM) (N=96)

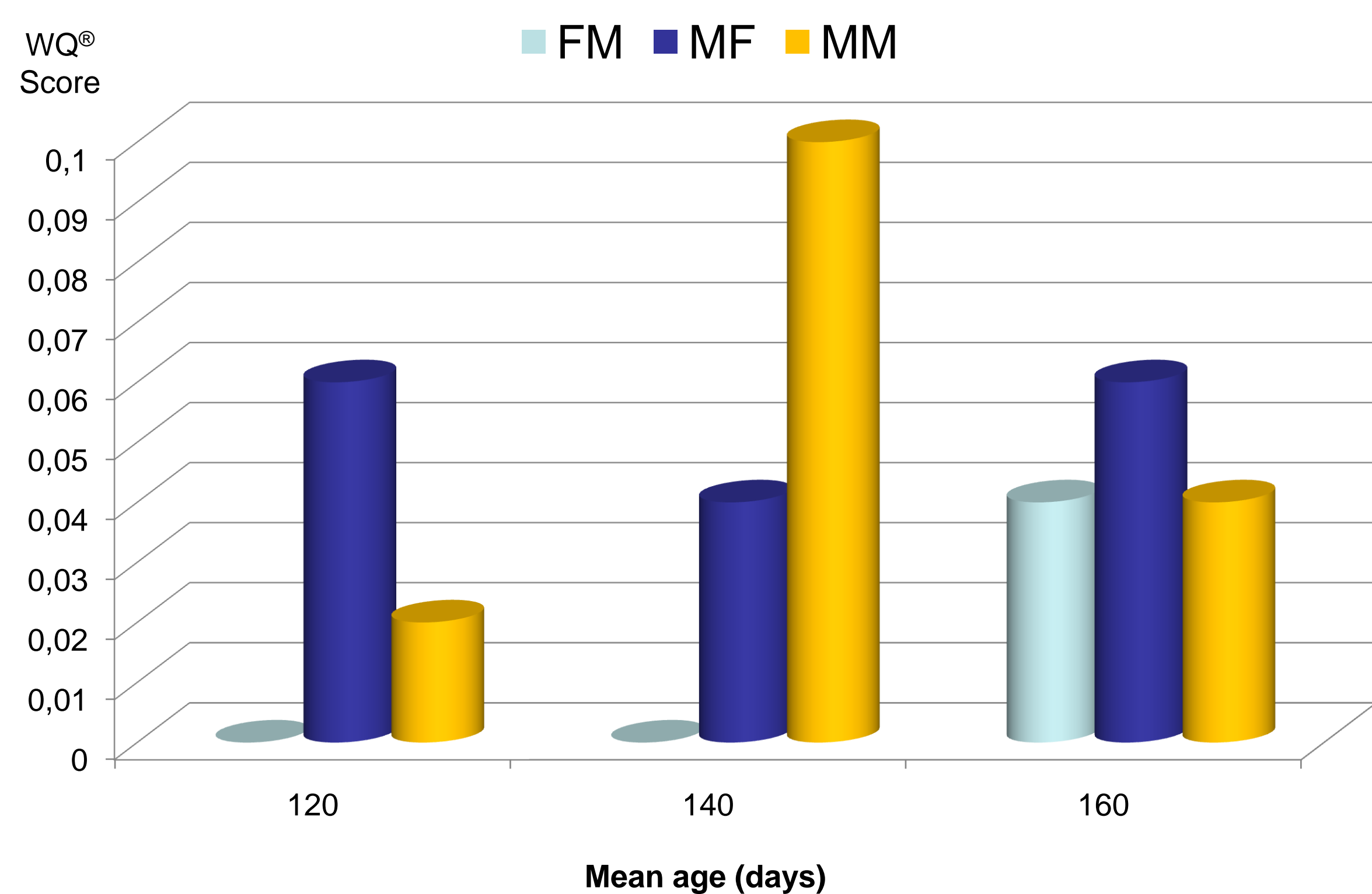
	MF	MM
Sample 90 days of age	2.88 (0.18) <sup>a</sup>	2.17 (0.18) <sup>a</sup>
Sample day before slaughter	3.97 (0.57) <sup>b</sup>	3.56 (0.55) <sup>b</sup>

### 2 Cortisol levels (ng/ml) in saliva throughout time for the entire males in the Split Marketing group (N=16)

	Sample 90 days of age	Sample day before 1st slaughter	Sample three days after 1st slaughter
MM	1.99 (0.66)	2.33 (1.15)	3.71 (1.76)
MF	3.17 (0.59)	5.02 (1.18)	6.15 (1.73)



### 3 Skin Lesions evaluated according to Welfare Quality® Protocol in the different housing systems



### 4 Androstenone (A) and skatole (B) levels (µg/g melted fat) in the different housing systems and slaughter strategies

