



# Androstenone sensitivity in Spain: differences between urban and rural consumers

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## Conclusions

Consumers from rural areas were more sensitive to androstenone than consumers from urban areas. The percentage of consumers that may reject the tainted meat is higher in rural than urban areas.



## Introduction



- Androstenone perception is genetically determined (ORD7D4 genotype; Keller et al., 2007)
- People react very differently to boar taint, depending on the country of origin, gender, age and their sensitivity (Font i Furnols et al., 2000; Font i Furnols et al., 2003; Weiler et al., 2000).

**The aim of this study was to assess the sensitivity to androstenone of Spanish consumers from urban or rural areas.**

## Materials and Methods

- After smelling pure androstenone (Weiler et al., 2000), 489 consumers were asked the following questions:

1. Can you smell anything?

0: No = anosmic 1: Yes = sensitive

2. From 1 to 8: how strong is this smell?

1: extremely weak; 8: extremely strong

No	Yes, I smell something							
0	1	2	3	4	5	6	7	8
Anosmic			Sensitive					

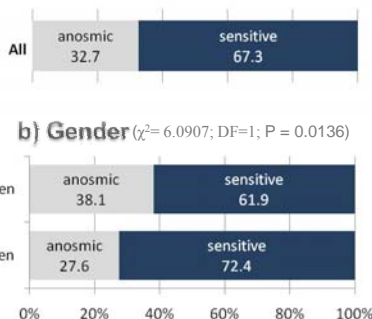
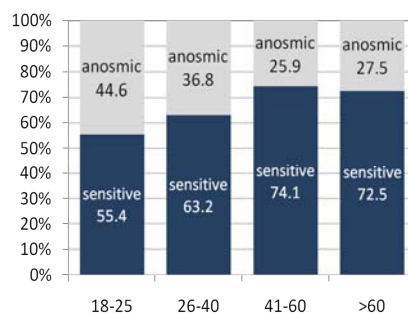
3. Do you like this smell?

0: No, I don't like it; 1: Neutral; 2: Yes, I like it.

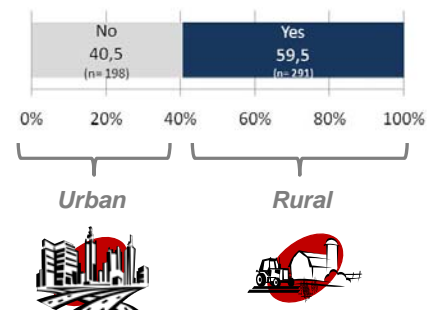


## Results

### 1 Can you smell anything?

a) All ( $\chi^2=40.3$ ; DF=2;  $P < 0.0001$ )c) Age ( $\chi^2=11.2$ ; DF=3;  $P = 0.0108$ )

### 2 Have you ever lived in a rural environment?

 $(\chi^2=22.6$ ; DF=1;  $P < 0.0001$ )

Urban

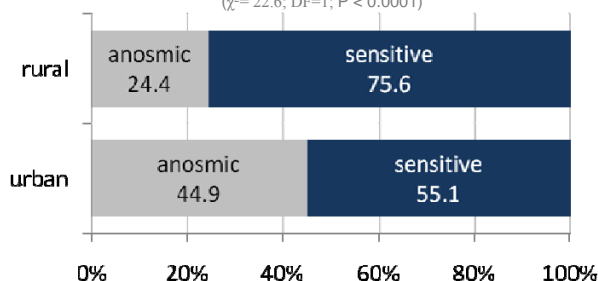


VS

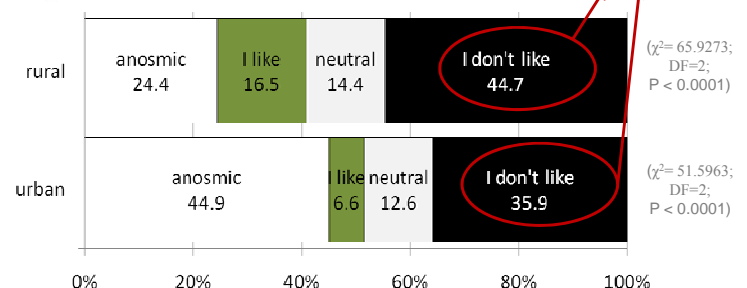
Rural



### 3 Can you smell anything?

 $(\chi^2=22.6$ ; DF=1;  $P < 0.0001$ )

### 4 Do you like this smell?



Percentage of consumers that may reject tainted meat.

 $(\chi^2=65.9273$ ; DF=2;  $P < 0.0001$ ) $(\chi^2=51.5963$ ; DF=2;  $P < 0.0001$ )