



Danish consumers sensitivity towards the boar taint compounds skatole and androstenone

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INTRODUCTION

- Production of entire males will result in some carcasses with boar taint – an unpleasant flavour
- Boar taint is caused by the compounds skatole and androstenone
- Skatole can be detected by most consumers while some consumers have anosmia towards androstenone
- Even though skatole can be detected by most consumers, the sensitivity might differ
- Consumer reactions towards tainted meat need to be known to establish a sorting limit for the carcasses at the slaughterhouses

MATERIAL AND METHODS

- Consumers in the age interval of 15 - 99 years (n=1555)
- Triangle test, 20 µl propylene glycol (blind) versus – 20 µl androstenone (20 ppm or 1 ppm) – 20 µl skatole (0.15 ppm solution)
- Check All That Apply (CATA), identification of terms most associated with the smell of androstenone and skatole, respectively.
- The effect of age was tested in logistic regression models using likelihood ratio tests, and the effect of gender was tested with chi-square tests.

CONCLUSION

- Sensitivity towards androstenone is age related. The proportion of sensitive consumers increases with increasing age up to 80 years, after which the sensitivity decreases.
- In total, between 12.5 and 38.6 % of the consumers are sensitive towards androstenone.
- More females than males are sensitive towards androstenone, 2.1-13.7 % are highly sensitive
- Between 2.8 and 7.9 % of the consumers were classified as highly sensitive towards skatole. This proportion was constant with age up to 80 years, and no difference was seen between genders.



RESULTS

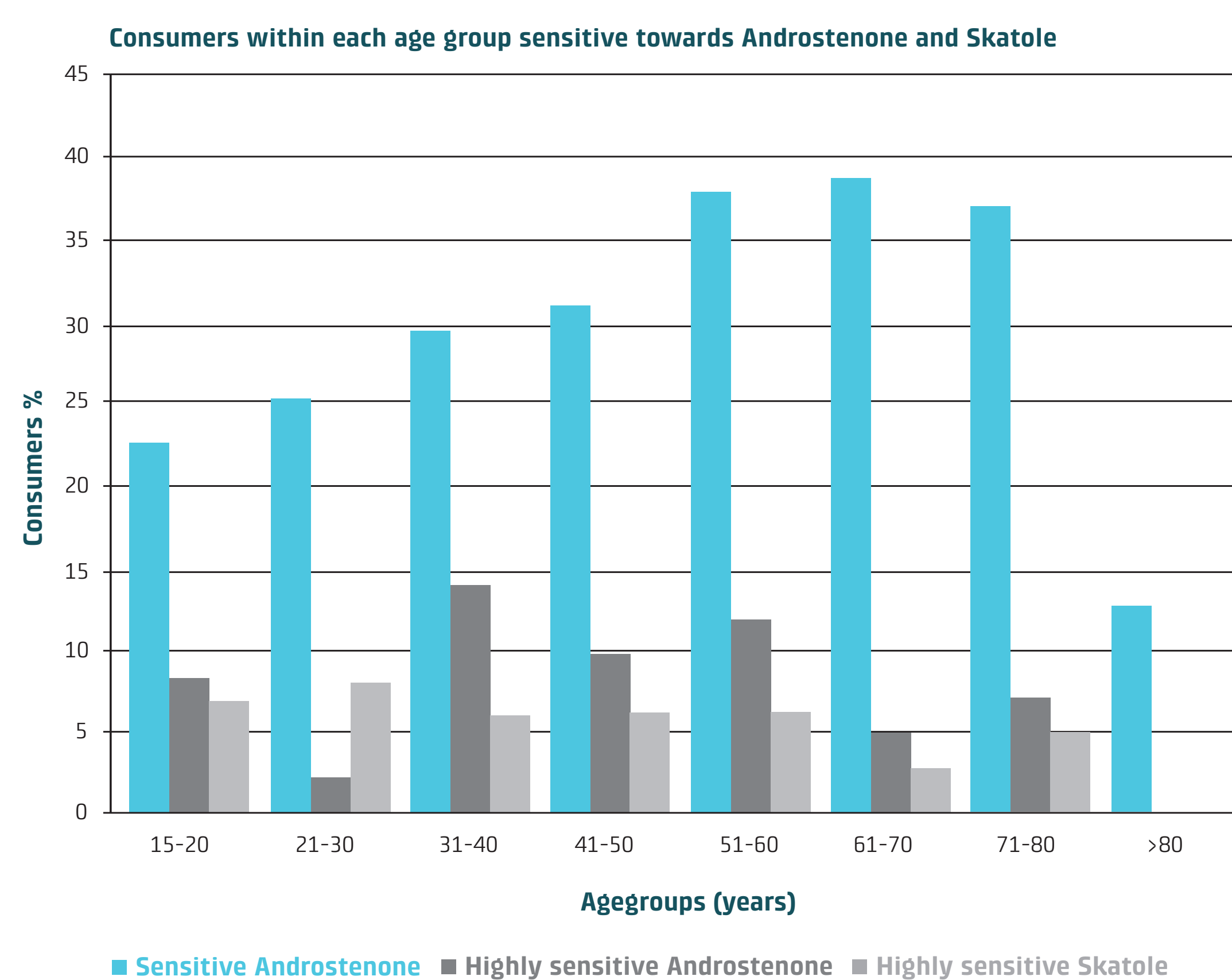
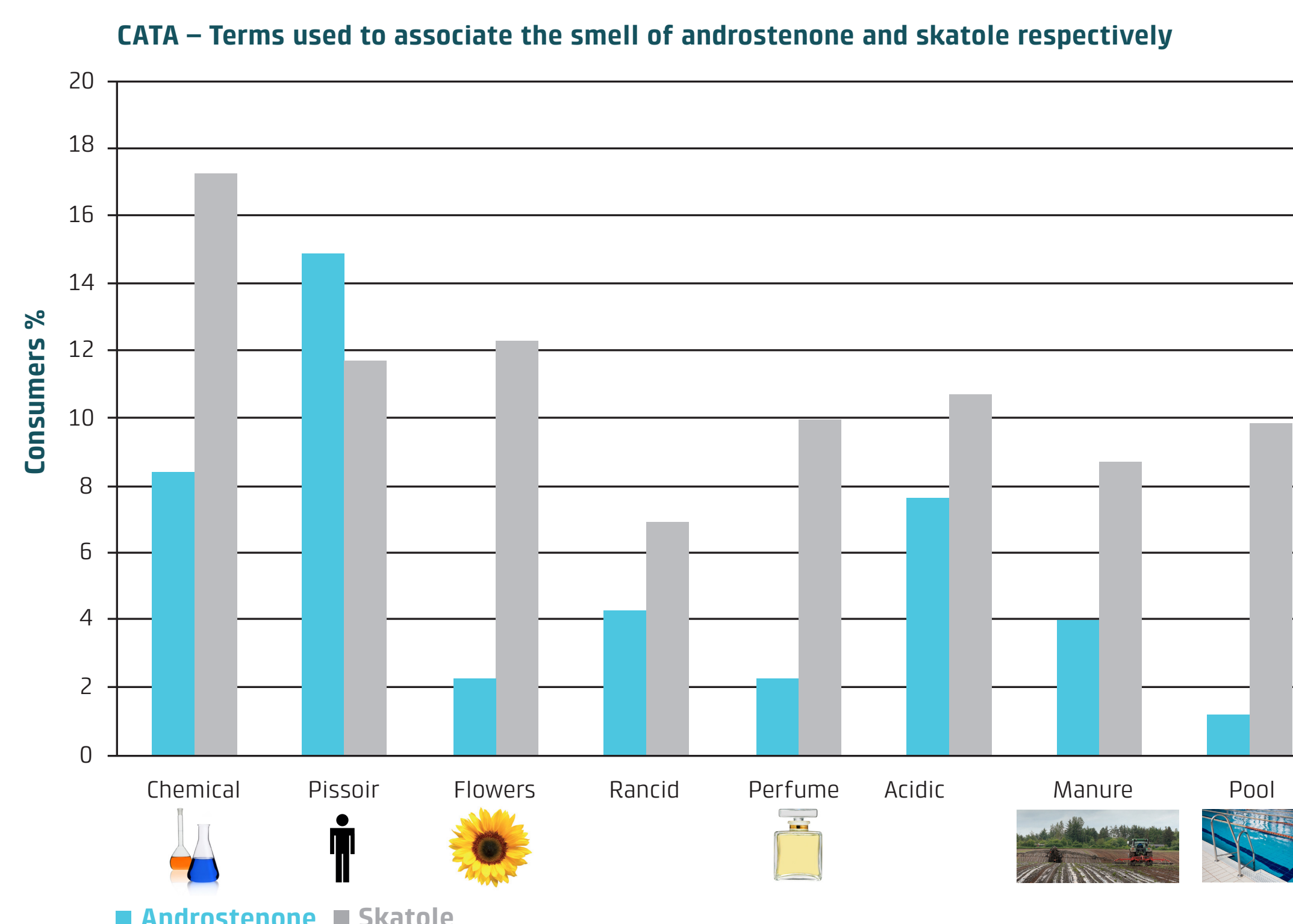


Table 1. Per cent consumers within each gender, who are sensitive towards androstenone and skatole

	Sensitive Androstenone	Highly sensitive Androstenone	Highly sensitive Skatole	N
Male	23.4	8.1	6.1	723
Female	34.6	7.9	5.6	832
P(difference)	<0.001	0.91	0.20	



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