

DIFFERENCES IN CONSUMER PERCEPTIONS OF MEAT QUALITY

Peter Purslow^{*1}, Rosana Cepeda¹, Estefania Cáfferro¹, Lorena Garitta², Miriam Sosa², Damian Frank³, Lisa Duizer⁴, Tania Ngapo⁵, Heather Bruce⁶, Renata Nassu⁷, and Maeve Henchion⁸

1. Facultad de Ciencias Veterinarias, Universidad Nacional del Centro de la Provincia de Buenos Aires, Tandil, Argentina

2. Departamento de Evaluación Sensorial de Alimentos, Instituto Superior Experimental de Tecnología Alimentaria, 9 de Julio, Argentina.

3. The Commonwealth Scientific and Industrial Research Organisation, North Ryde, Australia

4. Department of Food Science, University of Guelph, Guelph, Ontario, Canada

5. Saint-Hyacinthe Research and Development Centre, Agriculture and Agri-Food Canada, Saint Hyacinthe, Quebec, Canada

6. Faculty of Agricultural, Life and Environmental Sciences, University of Alberta, Edmonton, Alberta, Canada

7. Embrapa Pecuaria Sudeste, São Carlos, SP, Brazil,

8. Teagasc, Rural Economy & Development Centre, Dublin, Ireland.

*Corresponding author email: ppurslow@vet.unicen.edu.ar

Abstract – A total of 1264 consumers in Argentina, Australia, Brazil, Canada and Ireland were asked a common set of questions to determine cross-cultural similarities and differences in the preferences of meat consumers. The questions were divided into three categories: (a) frequency of meat consumption, (b) beef meat quality attributes and (c) meat preparation, conservation and hygiene. Differences in attitudes to pasture vs feedlot production, animal welfare and sustainable production methods were apparent. Variations in frequency of consumption, the most favoured cuts and meat preparation habits exist among the countries.

Key Words – consumer preferences, meat, beef, cross-cultural

I. INTRODUCTION

Consumer perspectives should be one of the key drivers of actions by the meat industry to improve meat quality, although other drivers, such as technology developments, are also important. Quality attributes are important to consumers of fresh meat, especially in high-cost fresh meats such as beef, and both intrinsic and extrinsic quality attributes influence purchasing decisions (Grunert, 2005). There is a relative lack of information on cross-cultural differences in the preferences of meat consumers. Although there have been cross-cultural comparisons of consumer perceptions of meat among some European countries (e.g. Verbeke et al., 2010), most surveys of consumer perceptions of meat have only focused on cohorts in individual countries. The purpose of the current study was to identify cross-cultural similarities and differences among consumers in Argentina, Australia, Brazil, Canada and Ireland.

II. MATERIALS AND METHODS

Consumers responded to an online questionnaire about (a) frequency of meat consumption, (b) relative importance of beef meat quality attributes, and (c) meat preparation, conservation and hygiene practices. Portuguese, Spanish, English and French versions were created to suit local language preferences. Data were collected using Sawtooth Software (Orem, UT, USA). The responses for each group of variables (a-c) were compared among countries. Given that the

variables are categorical (mostly ordinal), Multiple Correspondence Analysis (MCA) was used. Due to space constraints, only data from question sets (a) and (b) are reported here.

III. RESULTS AND DISCUSSION

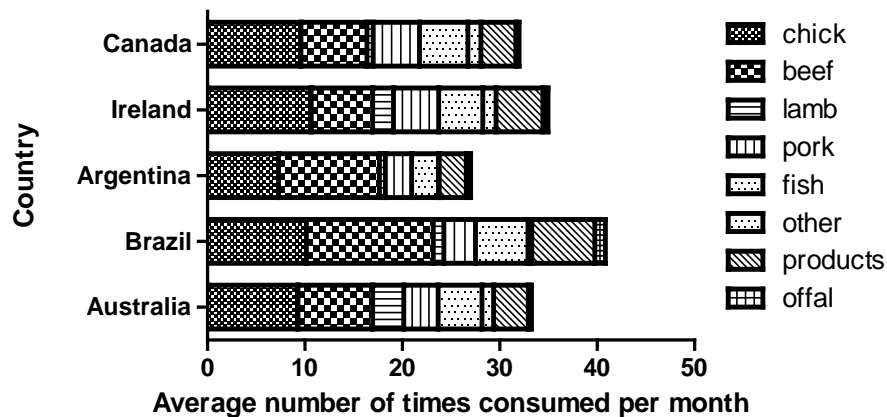


Figure 1. Average number of times consumers ate various types of meat, reported by country

Figure 1 shows different patterns of consumption reported by consumers in each country. Argentina and Brazil reported the greatest frequency of beef consumption, Ireland and Canada the greatest frequency of pork, and Australians the greatest amount of lamb. Note that the data show frequency of consumption, and not consumption in kg per capita; serving sizes may vary between countries.

The correspondence analyses for meat quality characteristics showed interesting differences among the five countries. Canadian consumers' responses to all questions were equivalent to the average among countries. Australia and Ireland most closely associated with agreement that "a large amount of intramuscular fat improves juiciness" and that "meat from supermarkets is of high quality." Consumers in Australia and Ireland also tended to agree that packaged and frozen meat was of high quality. All countries rated the quality of pasture-fed beef higher than feedlot with the largest difference given by Australian and the smallest by Brazilian consumers. Both Argentinian and Brazilian consumers considered meat wholesomeness an important purchase decision. Argentina was associated with more consumers unaware of brands or schemes guaranteeing meat quality. Brazilian consumers have a greater tendency to disagree that meat purchased in butchers' shops is of high quality and also to disagree that packaged/vacuum-packed meat is of good quality than consumers in other countries. Compared to other consumers, Brazilians showed a higher reported frequency of returning their purchases because the meat was not fresh. These consumers also reported the lowest willingness to pay more for meat produced under sustainable practices, while Australian consumers were the most willing. Australians were also the most willing to pay more for meat produced with good animal welfare standards, while Argentinian and Brazilian consumers were the least willing.

In answer to the question "Would you buy beef that had been hanging/maturing for the following times between slaughter and sale? (times specified were 1 day, 2 days, 3-5 days, 6-10 days, 10-15 days, more than 15 days post-mortem), Argentinians and Brazilians stated they would

prefer to buy meat at 1 or 2 days post mortem and would rarely or never buy meat aged more than 5 days. However, there seems to be confusion or lack of knowledge in the minds of consumers in some countries as to the time post mortem meat is usually sold in their country.

IV. CONCLUSION

This short paper highlights a few of the key points from this cross-cultural survey. It is clear that consumers in all countries were commonly orientated towards meat with good appearance, colour, tenderness and safety. Cross-cultural differences in attitudes to extrinsic factors such as pasture vs feedlot production, animal welfare and sustainable production methods were apparent. Variations in frequency of consumption, the most favoured cuts and meat preparation habits exist between countries with different culinary cultures. Further detailed results from this study will be published in forthcoming papers.

ACKNOWLEDGEMENTS

P.P and E.C. thank the Argentinian Ministry of Science and Technology (MINCyT) for financial support (PICT-2013-3292). MH thanks Teagasc for the financial support of data collection in Ireland.

REFERENCES

- Grunert, K. (2005). Food quality and safety: consumer perception and demand. *European Review of Agricultural Economics*, 32(3), 369–391.
- Verbeke, W., Pérez-Cueto, F. J. A., Barcellos, M. D. de, Krystallis, A., & Grunert, K. G. (2010). European citizen and consumer attitudes and preferences regarding beef and pork. *Meat Science*, 84(2), 284–292.