Senate Community Affairs Committee

ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

HEALTH PORTFOLIO

Budget Estimates 2015–2016, 1 - 2 June 2015

Ref No: SO15-000407

OUTCOME: 1 – Population Health

Topic: Acetic Acid use in Kangaroo Meat

Type of Question: Written Question on Notice

Senator: Rhiannon, Lee

Question:

a) What is the purpose of using acetic acid in meat for human consumption?

- b) What specific contaminants and pathogens is acetic acid used to treat?
- c) Is it expected that kangaroo meat will not be treated with acetic acid on regular basis?

Answer:

- a) Solutions of organic acids (1–3 per cent), such as lactic, citric and acetic acids, can be used during the carcass wash steps in commercial meat processing plants and help to reduce any contamination with potential pathogens.
- b) Organic acids (lactic, acetic, and propionic) have been reported to decrease populations of *E. coli* and other bacteria (Dubal et al., 2004; Ramirez et al., 2001; Laury *et al.* 2009).
- c) The use of organic acids such as acetic acid in the production of meat from kangaroo and other species, is the responsibility of the food manufacturer and relevant State and Territory authorities. FSANZ is not aware of the extent of use of acetic acid on kangaroo meat.

References

Dubal, Z. B., Paturkar, A. M., Waskar, V. S., Zende, R. J., Latha, C., Rawool, D. B. Kadam, M. M. (2004) Effect of food grade organic acids on inoculated S. *aureus*, *L. monocytogenes*, *E. coli* and *S. Typhimurium* in sheep/goat meat stored at refrigeration temperature. Meat Science 66: 817-821.

Laury, A.M., Alvarado, M.V., Nace, G., Alvarado, C.Z., Brooks, J.C., Echeverry, A., Brashears, M.M. (2009) Validation of a lactic acid- and citric acid-based antimicrobial product for the reduction of *Escherichia coli O157:H7* and *Salmonella* on beef tips and whole chicken carcasses. Journal of Food Protection 72: 2208-2211.

Ramirez, A. J., Acuff, G. R., Lucia, L. M., Savell, J. W. (2001) Lactic acid and trisodium phosphate treatment of lamb breast to reduce bacterial contamination. Journal of Food Protection 64: 1439-1441