NUTRIENT COMPOSITION OF AUSTRALIAN PORK

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The official Australian food composition tables (Thomas & Corden, 1977) contain out-dated information on meat derived from overseas analyses carried out many years ago.

Two studies were carried out to determine the composition of present-day Australian pork. In one study, conventional cuts (forequarter chop, leg, mid-loin chop) and 'new-fashioned' cuts (butterfly steak, leg steak and medallion steak) of pork were purchased retail from Sydney butchers and supermarkets in suburbs across the socioeconomic scale. Cuts, raw and cooked, were dissected and the fat and lean sections analysed separately for moisture, protein, ash, fat, fatty acids, cholesterol, sodium, potassium, calcium, iron, magnesium, zinc, thiamin, niacin, riboflavin, retinol and β-carotene. In a second study, two carcases were butchered on opposing sides in conventional and 'new-fashioned' equivalent cuts, and the cuts were analysed, raw and cooked, lean and fat homogenised together, for moisture, protein, fat, ash, cholesterol, iron, zinc and thiamin.

The results showed, as expected, that 'new-fashioned' pork was lower in fat than conventional pork (raw: 7.0 - 27.2 g/100 g versus 28.1 - 30.7 g/100 g). Both types of cut were lower in fat than the cuts reported in Thomas and Corden (1977) (raw: 33.8 - 55.5 g/100 g). In addition, the fat content of raw pork muscle at 0.8 - 2.7 g/100 g was lower than in Thomas and Corden (1977) at 10.1 g/100 g and lower than recent data reported for fat in US and UK pork muscle at 6.8 g/100 g and 7.1 g/100 g, respectively (Paul and Southgate 1978; USDA 1983). This difference is probably due to different animal husbandry techniques adopted in Australia.

Other differences in nutrient composition found were the lower iron content of raw pork muscle at 0.7 - 1.1 mg/100 g than that reported in Thomas and Corden (1977) at 2.8 mg/100 g. In addition, the cholesterol content of raw pork muscle was lower at 46 - 54 mg/100 g than US and UK raw pork muscle at 65 and 69 mg/100 g, respectively. This is probably due to the lower fat content of the Australian raw pork muscle.

PAUL, A.A. and SOUTHGATE, D.A.T. (1978). 'The Composition of Foods' (HMSO: London).

THOMAS, S. and CORDEN, M. (1977). 'Metric Tables of Composition of Australian Food' (AGPS: Canberra).

USDA (1983). 'Composition of Foods. Pork Products. Raw, Processed, Prepared' Agric. Handbk. No.8-10. (USDA: Washington, D.C.)

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