IMPACT OF OUTLET AND NEIGHBOURHOOD ON THE FAT CONTENT OF UNTRIMMED RETAIL BEEF AND LAMB CUTS

M.J. WATSON, N.J. MANN, J.E. GAZENBEEK, A.J. SINCLAIR and K. O'DEA

Meat and meat products contribute around 30% of the total fat in the Australian diet, and a higher proportion of saturated fat. Meat is sold from a range of retail outlets, the main differentiation being between butchers and supermarkets. It is of interest to establish whether this and neighbourhood affect the fat content of red meat, especially in view of the evidence that modification of behaviour is influenced by socio-economic status (SES). Two samples of both rump steaks and midloin lamb chops were purchased at 2-weekly intervals from late August 1990 from four butchers and four supermarkets and the untrimmed meat samples analysed by the procedures of Mann et al. 1991. The outlets selected in the Geelong region were from Local Government Areas in low (0.05 percentile) and high (0.84 percentile) SES for Victoria.

As expected overall fat content (g/100g) of rump steak was less than midloin chops, (see table). Analysis of variance was conducted on individual cuts (with log transformation) to account for outlet, SES and period of collection. Period was significant ($P<0.001$) in both cuts, but this is not discussed further because analysis for a full year is incomplete. The fat content of the rump steak from butchers was lower in the low SES than other outlets (outlet x SES interaction, $P<0.01$).

	High socio-economic status		Low socio-economic status	
Rump Steak	Butcher	Supermarket	Butcher	Supermarket
Mean ± SEM *	14.9 ± 0.5	14.5 ± 0.5	13.6 ± 0.6	15.1 ± 0.5
Range	7.0 - 25.2	6.0 - 30.6	4.1 - 31.0	6.4 - 31.5
Midloin Chop				
Mean ± SEM	27.7 ± 0.6	25.7 ± 0.5	29.3 ± 0.8	26.6 ± 0.5
Range	16.0 - 45.9	15.4 - 38.0	12.9 - 51.2	16.3 - 39.1

* Mean fat (g/100g) ± standard error of mean value, n=88

The fat content of midloin chops was lower in the supermarkets compared with butchers (26.1±0.4 vs. 28.5±0.5, $P<0.001$). This was due to the influence of one chain with the two lowest ranking stores, which was lower (23.9±0.4 vs. 28.3±0.5) than the other chain which was similar to the butchers shops. The lower fat content of this chain's midloin chops probably reflects a higher level of trimming compared with other outlets, although the cut retains a high fat content. Further, the mean fat content of this chain's rump steak was similar 15.0±0.5 to the other stores, (combined value 14.4±0.3).

There is no substantial indication from this data that the fat content of these cuts of beef and lamb varies significantly between neighbourhoods of differing SES or between supermarket and butchers. While the meat industry continues to focus on the benefit of lean meat in the diet, eg. in highlighting participation in the National Heart Foundation (NHF) "Pick the Tick" program, the reality is that the domestic supply generally remains well outside this specification. In this study, none of the lamb and only 18% of the beef was less than 10% fat (adequate for NHF approval). Health professionals need to work with the production, processing and marketing sectors of the meat industry to ensure that the potential benefits of lean meat in the diet can be realised.

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Department of Human Nutrition, Deakin University, Geelong, Victoria 3217