# Venison quality

**Joanne Stevenson-Barry**
*AgResearch Invermay Agricultural Centre, Mosgiel, New Zealand*

*Abstract*

Venison quality, as with other meats, encompasses a range of attributes including yield, safety, appearance and palatability. Venison is a highly palatable lean meat and it's fat, iron and cholesterol contents are compared with other meats. Seasonal differences in growth-rate and fat content affect the yield and palatability of venison. Young red deer carcasses have 50-80% less carcass fat than sheep and cattle. Mature red deer stags slaughtered after the breeding season (rut) have lower carcass weights (25 to 30%) than those slaughtered pre-rut. Venison from red deer hinds and young red deer stags is more tender than that from mature stags. The way in which deer are farmed, processed and packaged can also influence venison quality. Processing conditions affect the safety, appearance and palatability of the product. Electrical stimulation of red deer, fallow deer and New Zealand wapiti-type deer carcasses improves tenderness of venison particularly when carcasses are placed in chillers within 2 hours of slaughter. Conditioning and ageing regimes further improve tenderness. Packaging also affects the safety and appearance of the product and hence it is shelf-life. The shelf-life of venison can be markedly increased by vacuum-packaging however, long-term chilled storage results in deteriorated colour stability. Recent evidence suggests that, as with other meat-producing animals, deer behaviour and pre-slaughter and stress affect venison appearance, palatability and shelf-life.