
# Influence of extending the pre-slaughter interval after second vaccination on the carcass cutting yield and the quality of meat from immunocastrated lambs

Tersia Needham, Helet Lambrechts, Louwrens Hoffman

PII: S0309-1740(18)30596-5
DOI: doi:10.1016/j.meatsci.2018.09.014
Reference: MESC 7691

To appear in: *Meat Science*

Received date: 8 June 2018
Revised date: 19 September 2018
Accepted date: 19 September 2018

Please cite this article as: Tersia Needham, Helet Lambrechts, Louwrens Hoffman , Influence of extending the pre-slaughter interval after second vaccination on the carcass cutting yield and the quality of meat from immunocastrated lambs. Mesc (2018), doi:10.1016/j.meatsci.2018.09.014

# Influence of extending the pre-slaughter interval after second vaccination on the carcass cutting yield and the quality of meat from immunocastrated lambs

**Tersia Needham[a], Helet Lambrechts[a] and Louwrens Hoffman[a,*]** lch@sun.ac.za

[a]Department of Animal Sciences, University of Stellenbosch, Private Bag X1, Matieland, Stellenbosch, 7602, South Africa

[*]Corresponding author.

**Abstract**

The influence of extending the vaccination-to-slaughter interval of immunocastrated lambs on carcass cutting yield and meat quality of the *Longissimus thoracis* (LT) muscle was investigated in forty Dohne Merino lambs (8.5 months old; 53.7 ± 4.8 kg). Immunocastration booster vaccination intervals of six (ICS6; n = 10) and four (ICS4; n = 10) weeks prior to the slaughter age were used, with two weeks between primary and secondary vaccinations. A further 10 lambs were Burdizzo-castrated at 6.5 months old (B). The control treatment remained intact (R; n = 10). Prime cutting yields, LT muscle area, LT subcutaneous fat thickness and instrumental meat quality were accessed. Both castration methods increased LT fat thickness and decreased meat CIE a* (redness) values. Extending the vaccination-to-slaughter interval of immunocastrates increased the gastrointestinal tract fat and decreased meat redness. Immunocastration of male lambs can thus be used to manipulate backfat without negatively influencing carcass weight, cutting yield or meat quality.

---

***Keywords:*** *Castration; Colour; Improvac; Longissimus thoracis; Ram*