

# Alfalfa grazing increases vitamin E content and improves fatty acid profile in *L. dorsi* from light lambs



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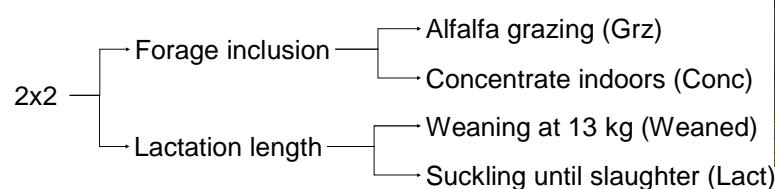
Feeding strategy affects intramuscular fat quality and meat shelf life. Forage-based diets can increase naturally the polyunsaturated fatty acids (PUFA) n-3 and  $\alpha$ -tocopherol contents in lamb meat

Assess the effects of forage inclusion in the diet and lactation length on vitamin E content and fatty acid profile in *L. dorsi*

## Materials and Methods



32 ewes + their single Rasa Aragonesa lambs



Slaughter weight: 22-24 kg

Samples of *L. dorsi* muscle (10-12th thoracic vertebrae)



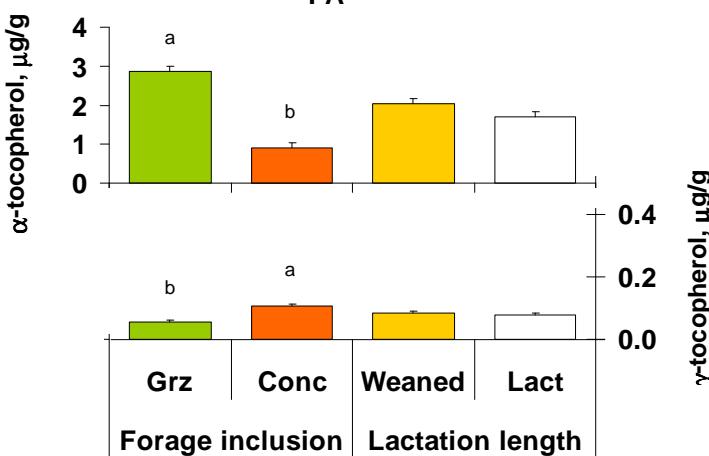
- Analyses:**
- $\alpha$ -tocopherol,
  - $\gamma$ -tocopherol,
  - Fatty acids (FA)



## Results

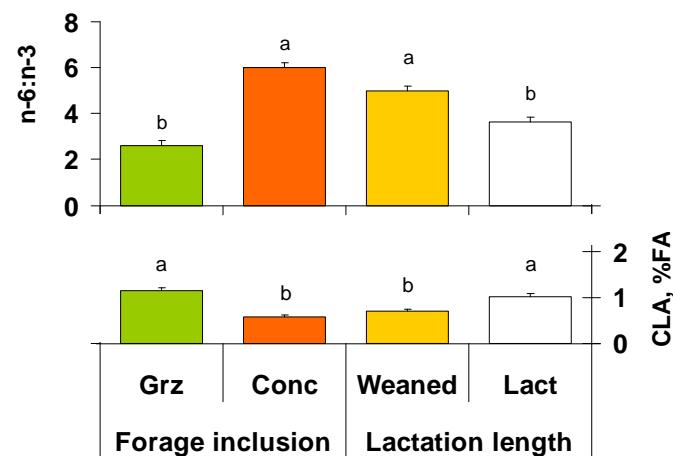
### Feeding strategy

Effect on:  $\alpha$ -tocopherol  
 $\gamma$ -tocopherol  
FA



### Lactation length

No effect on :  $\alpha$ -tocopherol  
 $\gamma$ -tocopherol  
Less clear effect on: FA



Within each parameter, means with different letter differ at  $P < 0.05$

Alfalfa grazing:

↑  $\alpha$ -tocopherol  
CLA

↓  $\gamma$ -tocopherol  
PUFA n-6:n-3

Weaning:

↑ PUFA n-6:n-3  
CLA

CLA  
PUFA n-3

Alfalfa grazing improved the FA profile and increased  $\alpha$ -tocopherol in light lambs meat. Lactation length had a less clear effect on Vitamin E but suckling until slaughter (22-24 Kg BW) increased CLA content and decreased PUFA n-6:n-3 ratio

**ACKNOWLEDGEMENTS:** The staff of 'the 'CITA' for their technical assistance. Study supported by the MCINN and the ERDF (INIA RTA2008-098; RZ2010-004).