

Meat quality of Norwegian lambs finished on semi-natural pastures, concentrate or ryegrass pastures

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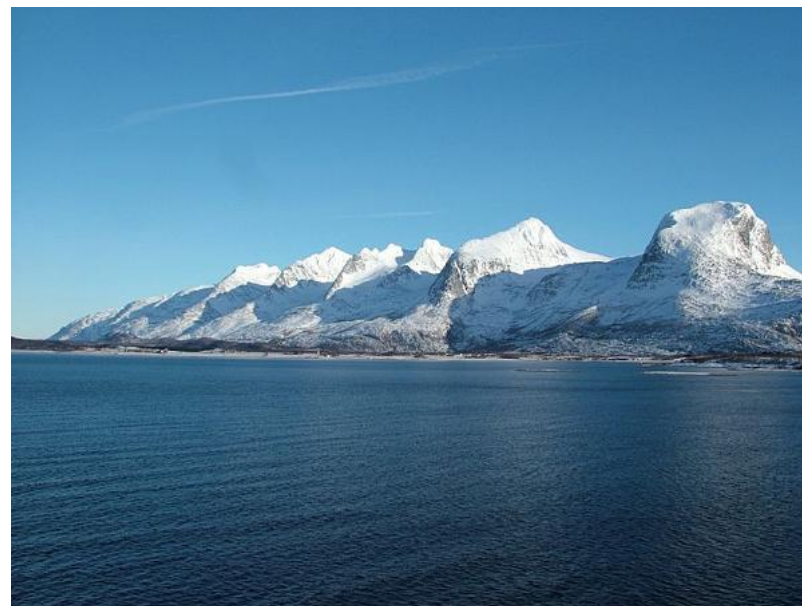
Introduction

- Type of fattening system may influence lamb meat quality
- Length of fattening period may influence fatty acid composition



Introduction

- European consumers divide meat into taste of
 - “milk or concentrate”
 - “grass”
- Positive association:
 - Natural
 - Local
 - Traditional
- Pasture-fed lambs in Norway may be appreciated

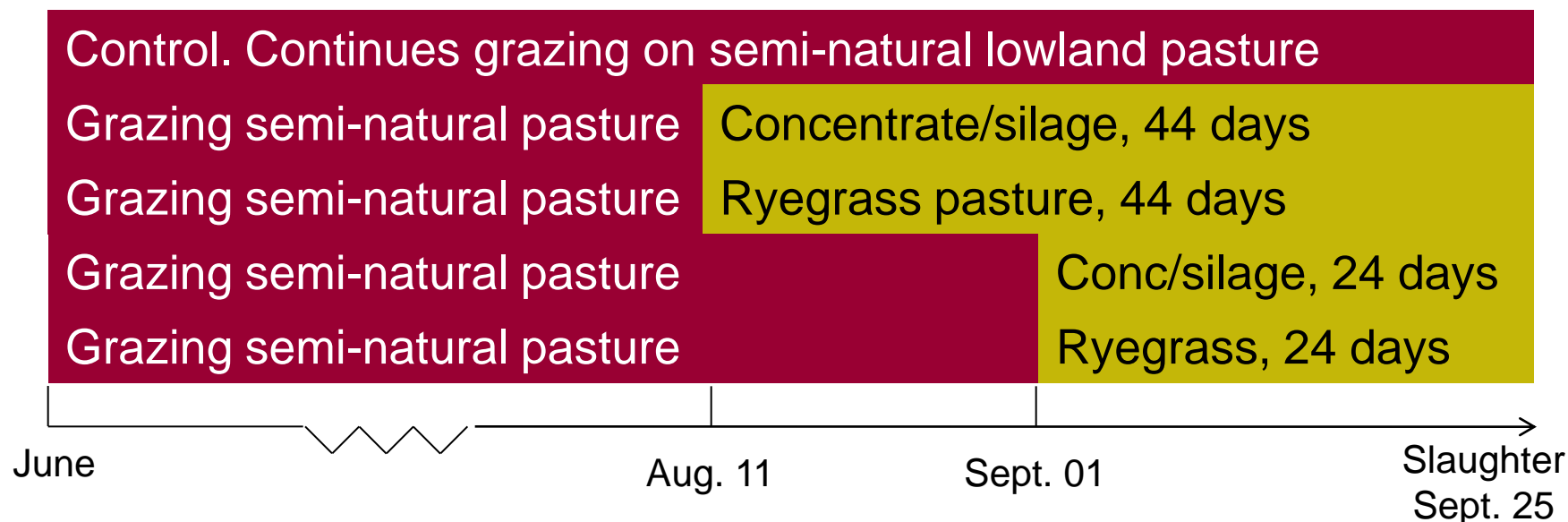


Objective

- Compare meat from suckling lambs slaughtered directly from a semi-natural lowland pasture or subjected to pre-slaughter diets



Design



M. Longissimus dorsi used for descriptive fatty acid analyses and sensory profile

15 carcasses from each treatment

Results fatty acid composition

	Control	Conc44	Conc24	Rye44	Rye24
Palmitic (C16:0)	27.4 ^{ab}	28.0 ^{ab}	28.3 ^a	27.1 ^b	27.0 ^b
Stearic (C18:0)	19.8 ^b	19.5 ^b	18.7 ^b	22.9 ^a	19.0 ^b
T-vaccenic (C18:1 <i>t-11</i>)	5.9 ^a	4.1 ^c	4.7 ^b	6.6 ^a	5.7 ^a
Oleic (C18:1 <i>n-7</i>)	32.2 ^b	35.2 ^a	34.3 ^a	31.3 ^b	34.6 ^a
Linoleic (C18:2 <i>n-6</i>)	1.38 ^{ab}	1.65 ^a	1.51 ^a	1.20 ^{bc}	0.99 ^c
α -Linolenic (C18:3 <i>n-3</i>)	1.66 ^a	0.96 ^b	1.52 ^a	1.59 ^a	1.59 ^a
Ω -6/ Ω -3	0.83 ^{bc}	1.80 ^a	1.00 ^b	0.78 ^c	0.63 ^c

Discussion: Fatty acid composition

- Concentrate:
 - Oleic acid (C18:1 n -9)
 - Linoleic acid (C18:2 n -6)
- Green plants and pastures:
 - Stearic acid (C18:0)
 - trans-vaccenic acid (C18:1 t -11)
 - α -linolenic acid (C18:3 n -3)
- Ω -6/ Ω -3 ratio < 4



Conclusion

- Concentrate and silage for 44 days affect fatty acid composition
- Pre-slaughter fattening for 24 days no effect on meat quality
- Separate marketing?





Thank you for your attention