

Alternative finishing strategies for Holstein-Friesian bulls slaughtered at 19 months of age



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Introduction

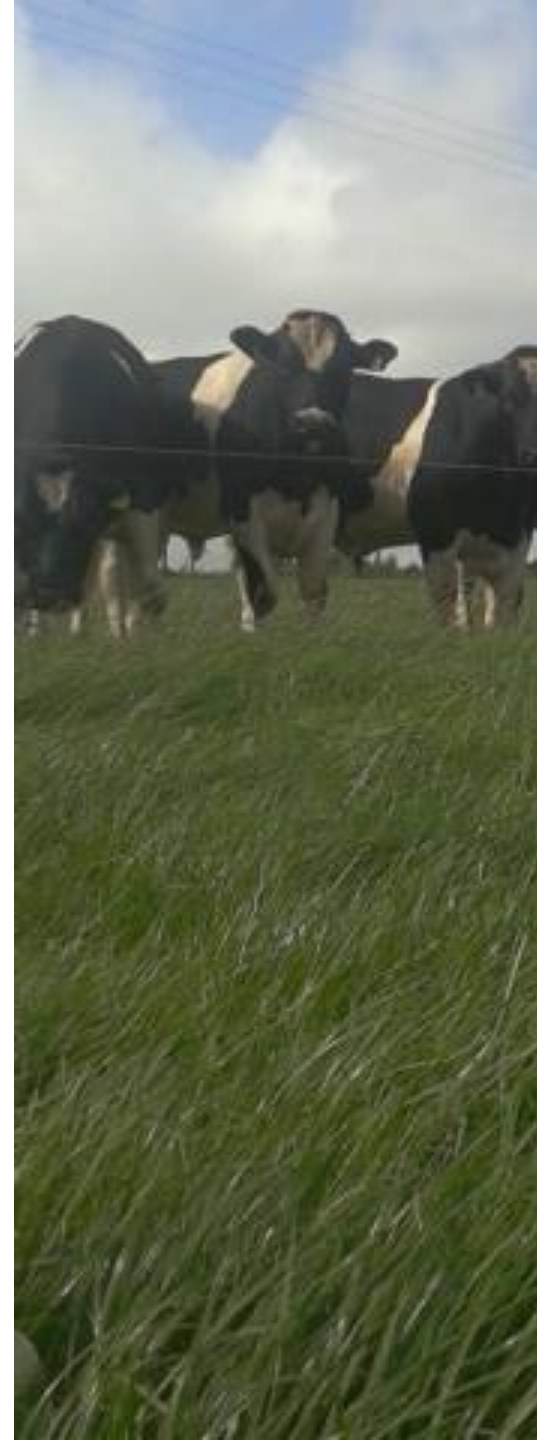
- **Dairy expansion**
 - **Abolishment** of milk quotas
 - **50% increase** in milk production (Food Harvest 2020)
 - Anticipated **increase** in the **proportion of male dairy calves** available for beef production
- **Dairy calf to beef production**
 - Traditionally **steer** production system
 - Increase in **bull beef production** (Bord Bia, 2014)
- **Why??**
 - Increased **live weight gains**
 - Greater **carcass weight at a younger age**
 - Potential to increase **stocking rate**
 - Increased **profit** on a per hectare basis (Ashfield et al., 2014)



Objectives

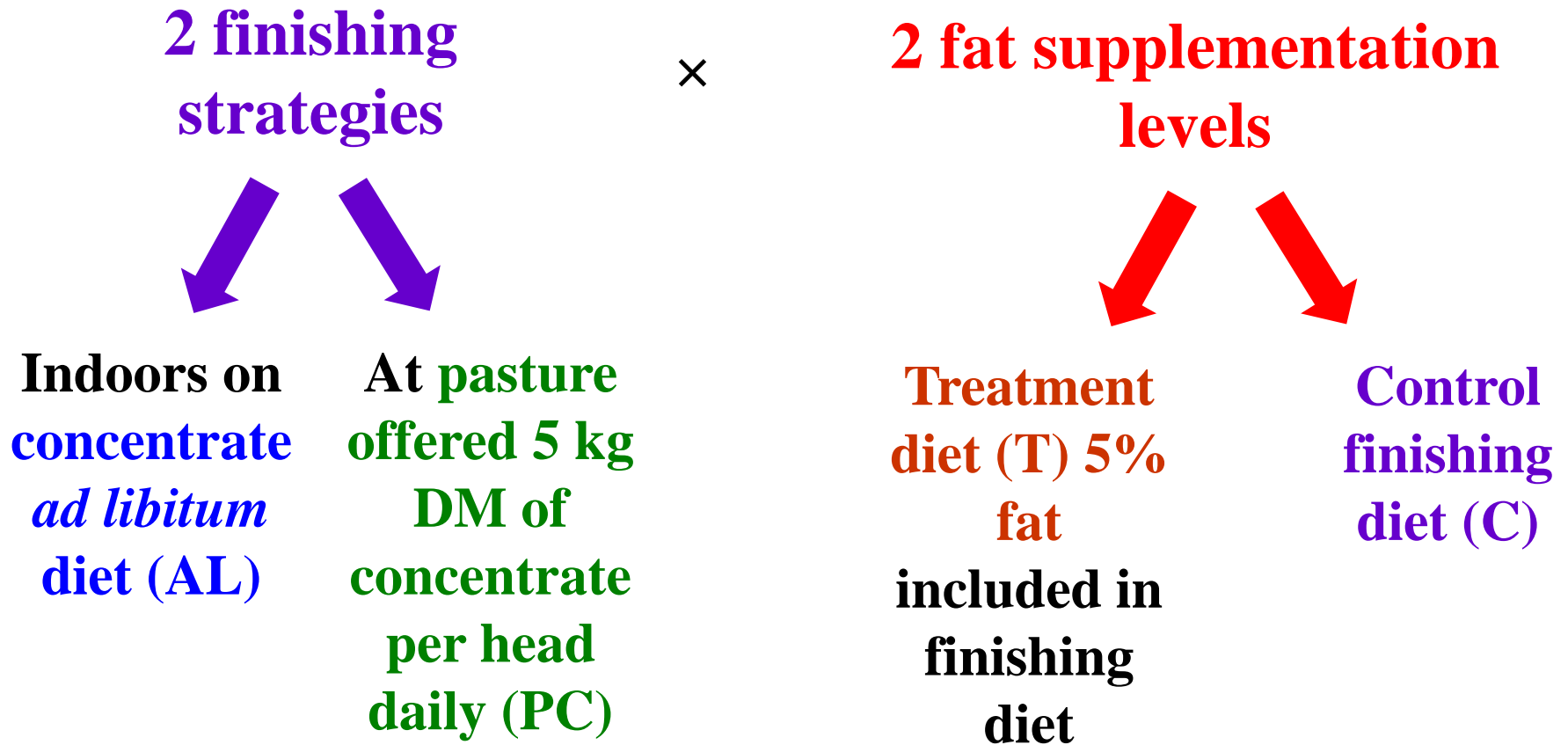
Effects of **alternative finishing strategies** on the performance of Holstein-Friesian (HF) bulls slaughtered at 19 months of age

Effects of a **fat supplement** on the performance of these bulls



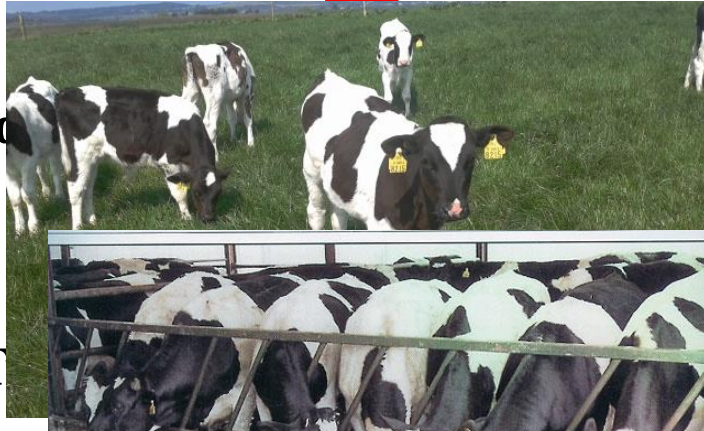
Materials and Methods

- Data were available for 58 spring born HF bulls



Grazed at pasture offered 1 kg DM of concentrate during the 1st season

Housed



**1.5 kg DM of
ov 3rd)**

T

s (April 9th)



6th – slaughter)

C bulls remained at pasture



n September



Materials and Method

- **Live weights recorded fortnightly**
- **Pre grazing sward heights:**
 - **During 2nd grazing season = 11 cm**
 - **During finishing = 8 cm**
- **Concentrates offered daily**
 - **Weighed back twice weekly**
- **Ultrasound measurements**
 - **Start of the finishing period**
 - **Pre slaughter**
- **Data were analysed using Proc MIXED of SAS**
 - **Fixed effects**
 - **Finishing strategy**
 - **Fat supplementation level**



Results



Results: Effects of finishing strategy

	<u>AL</u>	<u>PC</u>	<u>SEM</u>	<u>P-value</u>
Estimated concentrate DMI (kg/head)	1004	453	6.9	<0.001
ADG during finishing (kg/day)	2.09	1.42	0.070	<0.001
Slaughter weight (kg)	580	551	15.7	0.0745
Carcass weight (kg)	300	294	9.1	0.5729

Results: Effects of fat supplementation level

	<u>T</u>	<u>C</u>	<u>SEM</u>	<u>P-value</u>
Estimated concentrate DMI (kg/head)	716	741	4.9	<0.001
ADG during finishing (kg/day)	1.80	1.71	0.049	0.1910
Slaughter weight (kg)	571	560	11.1	0.4993
Carcass weight (kg)	302	292	6.4	0.2766

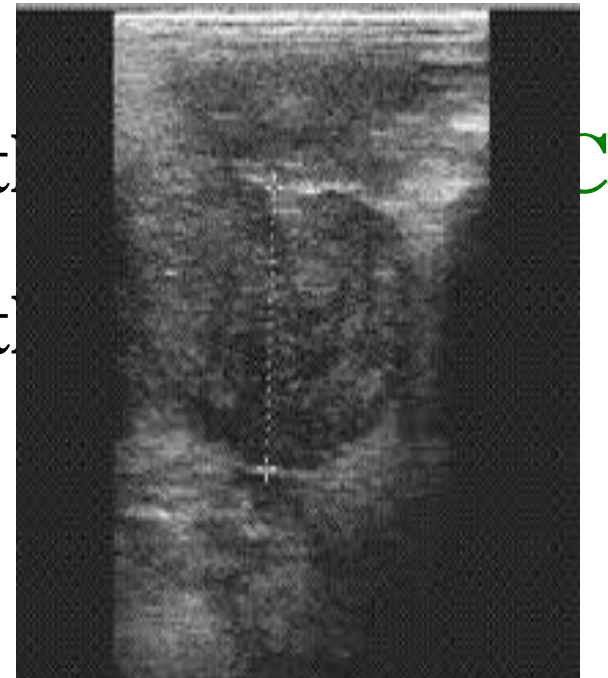
Results: Ultrasound measurements

- Subcutaneous (s/c) fat 1.3 mm greater for **AL** ($P < 0.01$)
- Similar depth of s/c fat for **T** and **C**

- S
- N



e depth
e depth



Conclusion

- Increased **concentrate DMI** for **AL**
- Greater **ADG** during finishing for **AL**
- Similar **carcass weight** and **conformation score**
- Greater fat score for **AL**

- Depressed **concentrate intake** for **T**
- Greater **kill-out** proportion for **T**



Thank you for your attention

Questions?



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