1) Introduction

Dairy systems in Atlantic Europe are ranging from low input grazing systems to high input confinement systems. The impact of these different systems on cow behaviour and animal welfare has not been extensively examined. Lying is believed to be important for cow comfort, and seems that they should be doing it when are not feeding.

2) Objective

To study the behaviour of two cow genotypes when managed within two contrasting milk production systems.

3) Material and Methods

Spring calving dairy cows: Holstein-Friesian (n=40) and Jersey x Holstein-Friesian crossbreds (n=40), managed into:

- Confinement system (n=40)
- Grazing system (n=40)

On three occasions during a six week period, each herd was observed at 20-minutes intervals between 16.00 – 22.00 h and 07.00 – 14.00 h.

The behavior of each cow was recorded as follows: feeding or grazing, lying, standing and ruminating.

Data were analysed as a 2 x 2 factorial design, with repeated measures (period), using REML Genstat.

4) Results and Discussion

Percentage of cows within each group involved in a range of activities

- a) Time spent lying, feeding and ruminating differed between periods, while time spent standing did not differ.
- b) Breed had no significant effect on any of the behaviours observed.
- c) Cows on the grazing system spent more time grazing, than those on the confinement system spent eating (523 vs. 174 min).
- d) Time spent lying (411 vs. 213 min), standing (237 vs. 86 min) and ruminating (244 vs. 141 min) were higher in the confinement than in the grazing system.

5) Conclusions

- Cows within the grazing system and confinement system behaved differently.
- Most of these differences likely result from the fact that grazing cows need more time to meet their dry matter intake requirements compared to cows on indoor diets.

6) Acknowledgements

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