

# Factors affecting the peripartal stress response in beef cows

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## Hypothesis

Calf management and genotype may be factors affecting the adrenal response around parturition.



## CONCLUSIONS

- ✓ Faecal glucocorticoid metabolites (GM) allow detecting the post-partum adaptative challenge and a potential stress of restricted suckling. However, they did not differ between breeds.

## MATERIAL AND METHODS

### Animals

- Winter-calving beef cows (live-weight 590 kg, BCS= 2.5, n=14, 7 Parda de Montaña and 7 Pirenaica) assigned within breed to restricted suckling once-daily (**RS1**) or ad libitum (**AS**) from the day after calving.

### Measurements and analysis

- Faecal samples were collected from the rectal ampulla of each cow at approximately 12, 48 and 72 h after delivery and freeze-dried to analyse glucocorticoid metabolites (**GM**) by RIA.

## RESULTS

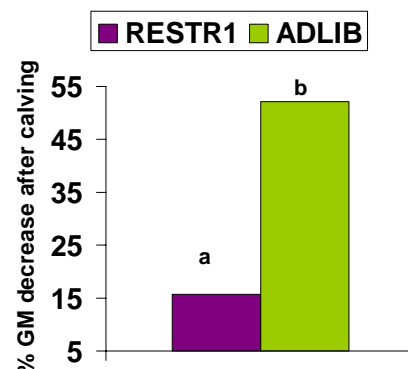
### Breed effect:

- Faecal GM concentration was **similar in both genotypes** throughout the 3 days after calving (mean 14.3 ng/g,  $P > 0.10$ ).

### Calf management x Time post-partum tendency ( $P=0.07$ ):



### Calf management tendency ( $P=0.09$ ):



Within each parameter, different letter denote a trend for statistical difference ( $P < 0.10$ ).