

Calving body condition affects somatotrophic axis response and ovarian cyclicity in beef cows

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Hypothesis

Is there any effect of breed and/or maternal body reserves at calving on the post-partum somatotrophic axis response and ovarian cyclicity?

CONCLUSIONS

- ✓ The nutritional status at calving but not breed influenced post-partum ovarian cyclicity through the response of GH and IGF-I hormones during lactation.

MATERIAL AND METHODS

Animals

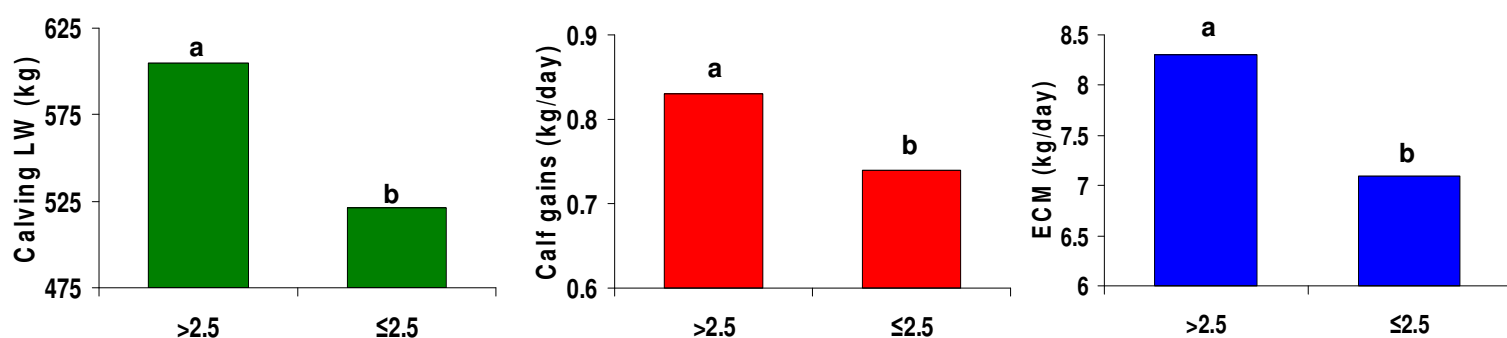
- **Parda de Montaña** (n=68) and **Pirenaica** (n=28) beef cows (northern Spain breeds).
- Divided according to **BCS after calving** (>2.5, [2.6-2.9] or ≤2.5, [2.2-2.5]) and fed a diet meeting maintenance requirements during 4 months post-partum.

Measurements and analysis

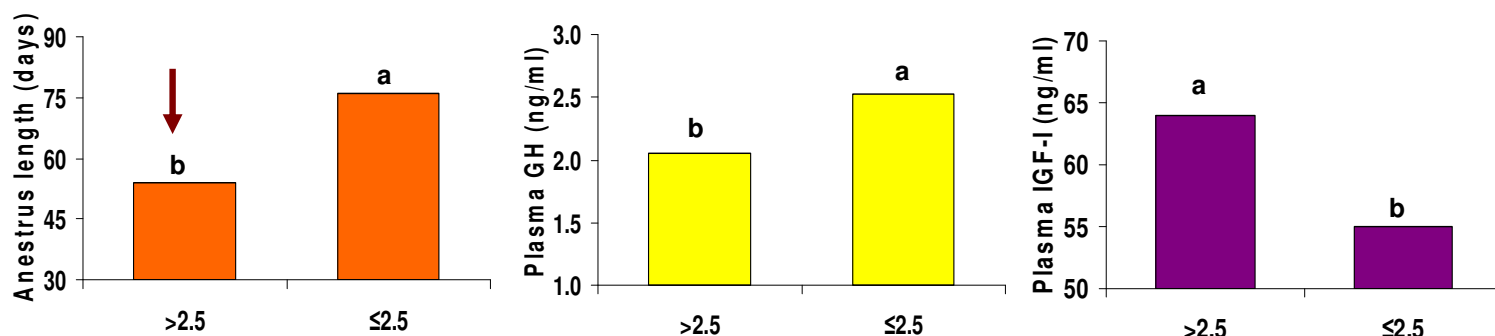
- Live-weight (LW) (weekly)
- Milk yield and composition by the oxytocin technique (monthly)
- Peripheral progesterone (twice weekly) to determine anestrus length and growth hormone (GH) (weekly) by RIA; and insulin-like growth factor-I (IGF-I) (fortnightly) by CIA.

RESULTS

BCS at calving effect



Best conditioned cows showed rather anabolic status even considering their greater milk output



Within each parameter, different letter denotes statistical differences (P<0.05).