

Physiopathological response of lactating ewes under different feeding systems

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AIM

To analyse the effects of the feeding system and stage of lactation on the immune and haematological parameters of sheep.



• Any **leukocyte** was affected by the **feeding system** during lactation ($P > 0.10$).

• **Stage of lactation had effect** on leukocytes (neutrophils, lymphocytes and monocytes), erythrocytes haematocrit and haemoglobin ($P < 0.05$, see **Figures**).

• **Erythrocytes** were not altered by the feeding system ($P > 0.10$), but **haematocrit** and **haemoglobin** tended to be lower in **GR** than in **S** ($P < 0.10$)

• **Platelets** were lower in **GR** than in **S**.

CONCLUSIONS

✓ The stage of lactation had major effects on ewe immune and haematological parameters, but not the feeding system during this period.

MATERIAL AND METHODS

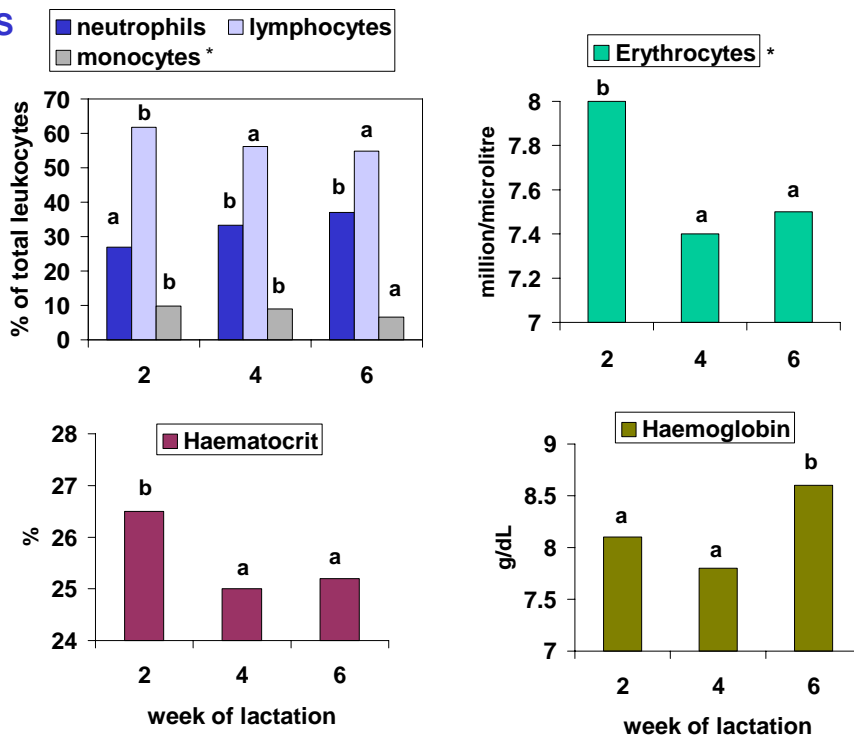
Animals and experimental design

• **Churra Tensina ewes** ($n=20$, BCS = 2.8) were allocated to 2 feeding systems from the week after lambing: permanent grazing mountain pastures (**GR**) or rationed grazing (8 h/day) with 0.5 kg barley meal supplement (**S**).

Measurements and analysis

• Blood samples were collected at weeks 2, 4 and 6 post-partum to determine leukocyte, erythrocyte and thrombocyte populations with a cell counter.

RESULTS



* Within each parameter, different letter denote statistical differences ($P < 0.05$).

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