Chewing behaviour of pregnant and lactating ewes fed long or chopped grass silage

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EAAP, 2012-08-29

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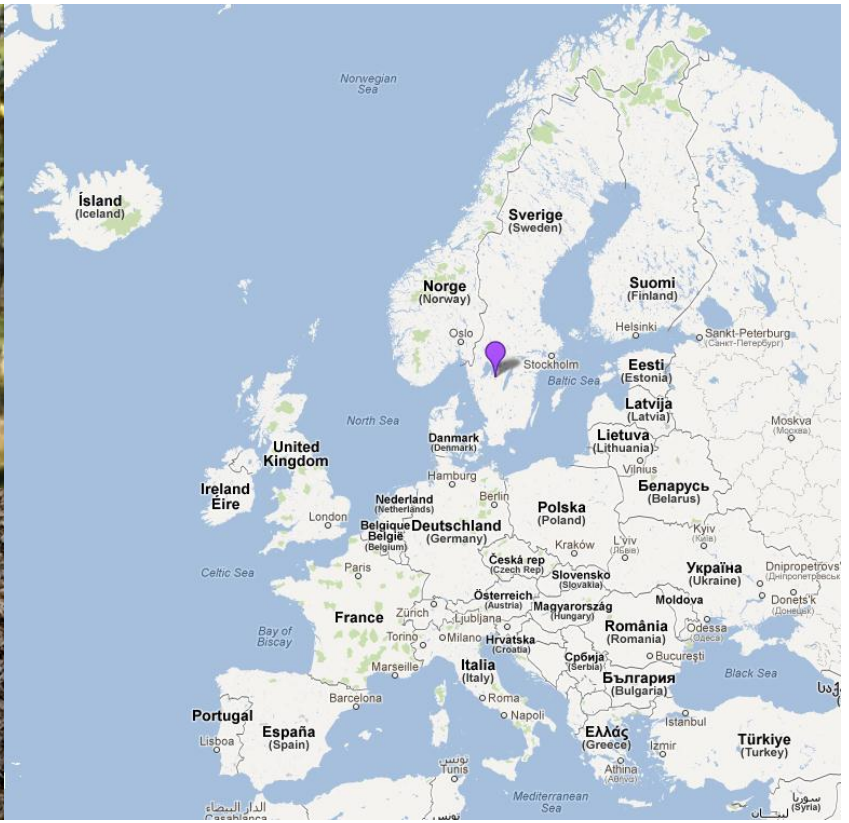

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Background

Very limited information available on effect of chopping grass silage and of mixing silage with concentrate on

- **feed intake**
- **chewing behaviour**

of high-producing ewes around lambing

Objective

To study effects of

- silage particle length
- feeding strategy

on

- feed intake
- chewing behaviour

in pregnant and lactating ewes

Experimental design

- Two experiments (Exp. 1 and Exp. 2)
- Seven ewes assigned to one of three dietary treatments:

US unchopped silage *ad libitum* and 0.8 kg concentrate daily, fed separately

CS chopped silage *ad libitum* and 0.8 kg concentrate daily, fed separately

CM chopped silage mixed with concentrate *ad libitum*

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Chemical composition of silages

	Exp. 1	Exp. 2
DM, g/kg	570	350
NDF, g/kg DM	579	482
CP, g/kg DM	143	189
IVOMD, g/kg	865	910
ME, MJ/kg DM	10.9	11.5

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DM, g/kg	570	350
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IVOMD, g/kg	865	910
ME, MJ/kg DM	10.9	11.5

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DM, g/kg	570	350
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CP, g/kg DM	143	189
IVOMD, g/kg	865	910
ME, MJ/kg DM	10.9	11.5

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DM, g/kg	570	350
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IVOMD, g/kg	865	910
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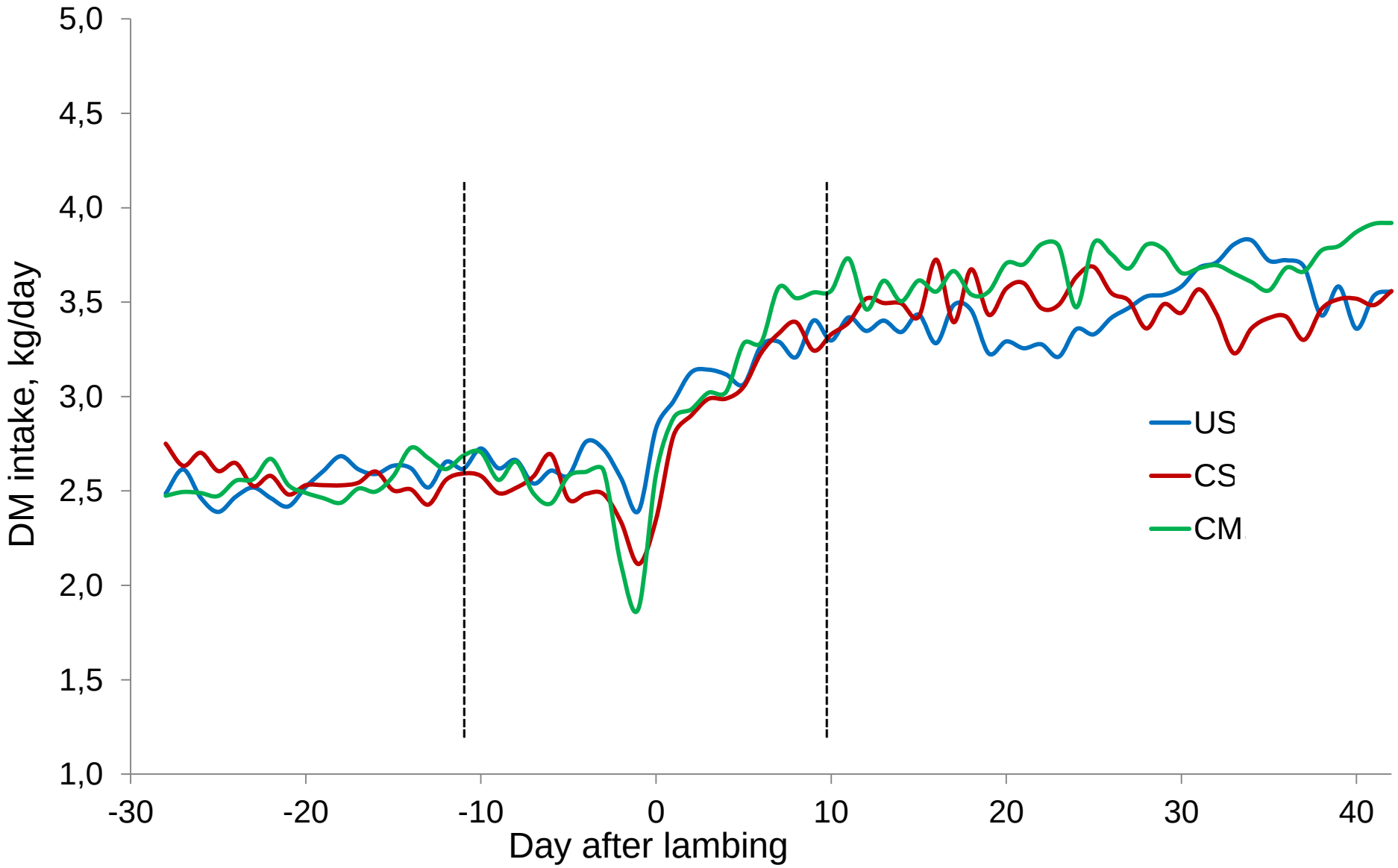
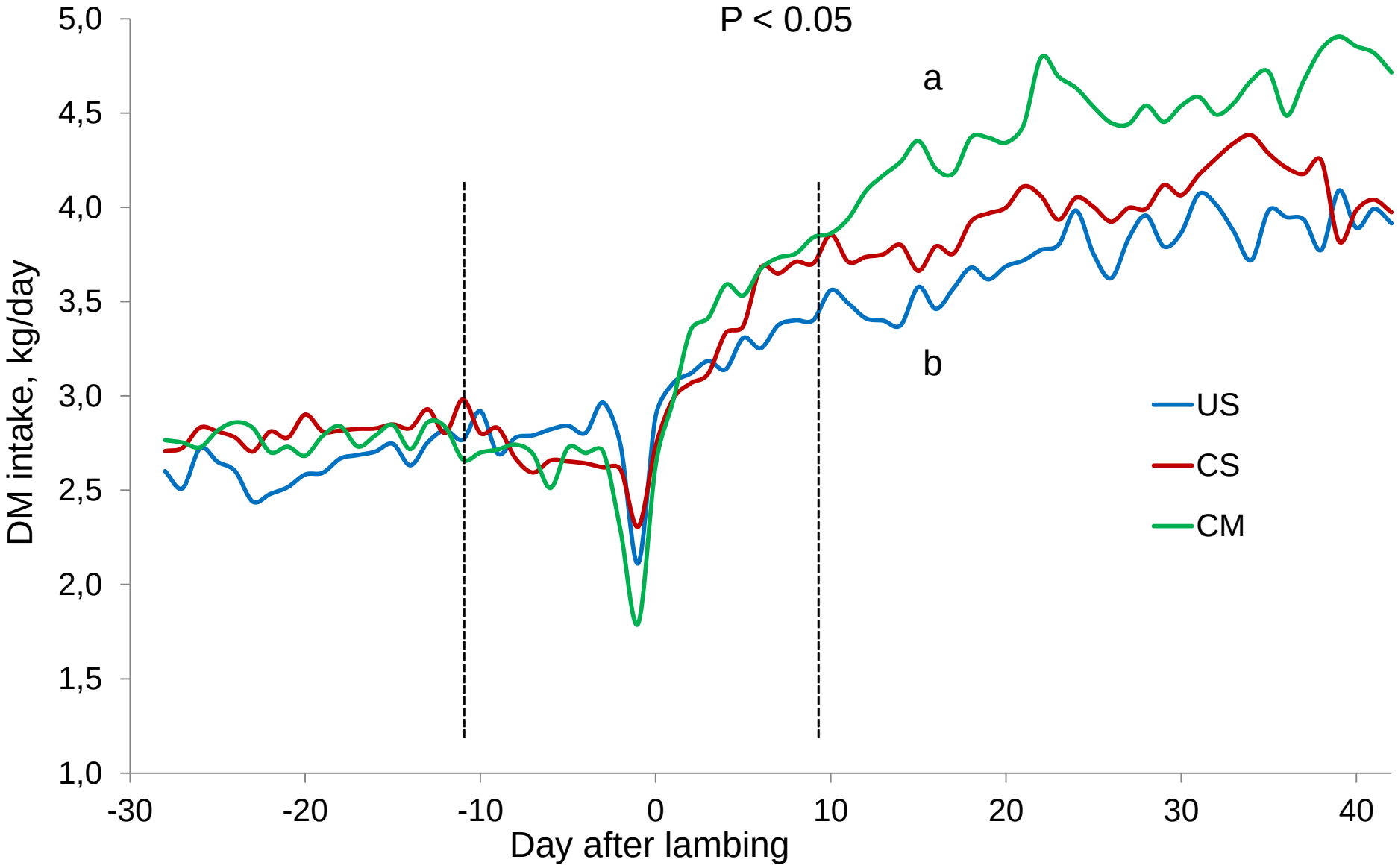
Silage particle length, mm

	Exp. 1	**Exp. 2**
Unchopped	170 ± 110	349 ± 169
Chopped	13 ± 2.8	18 ± 2.3

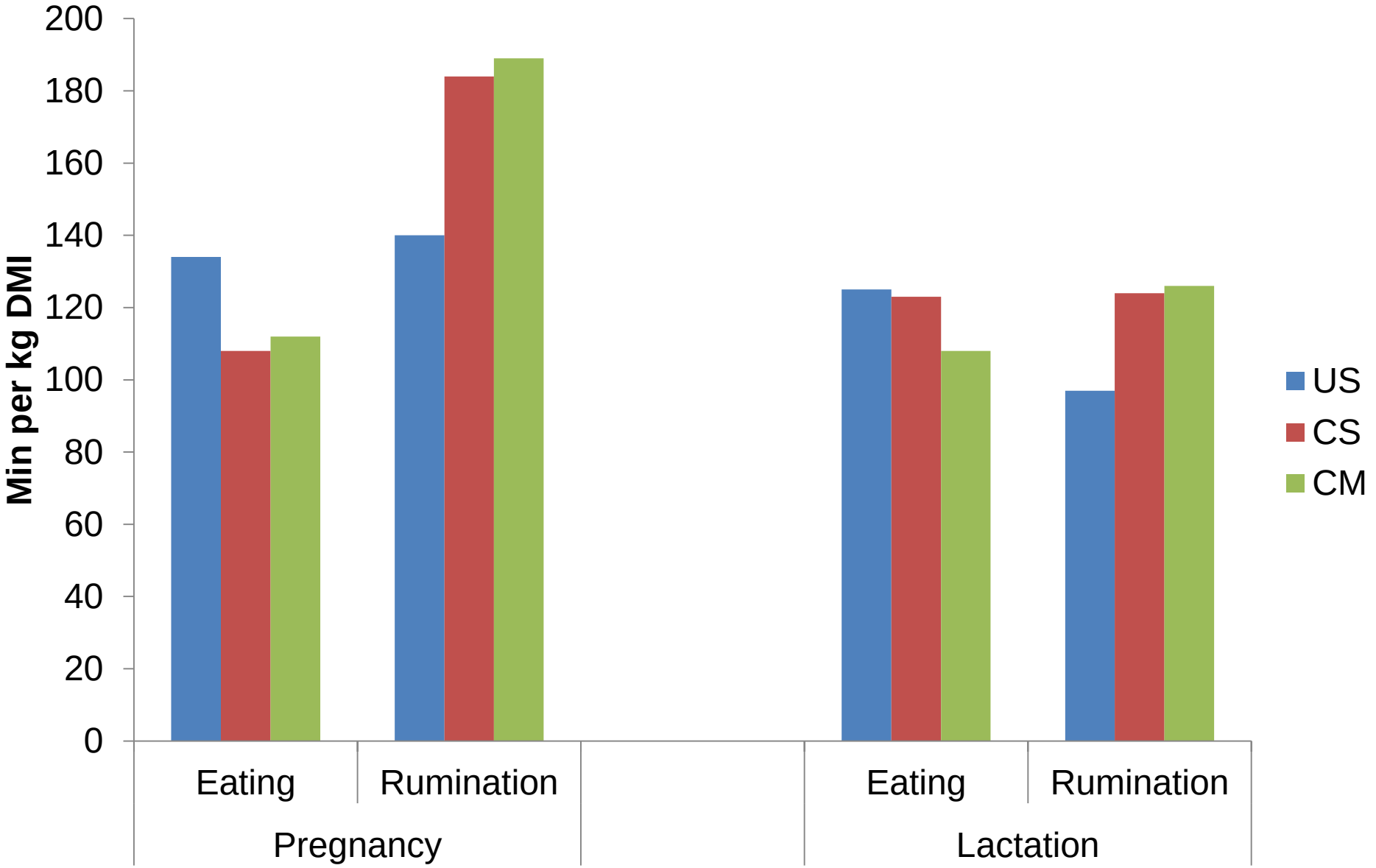
Feed intake, Exp. 1



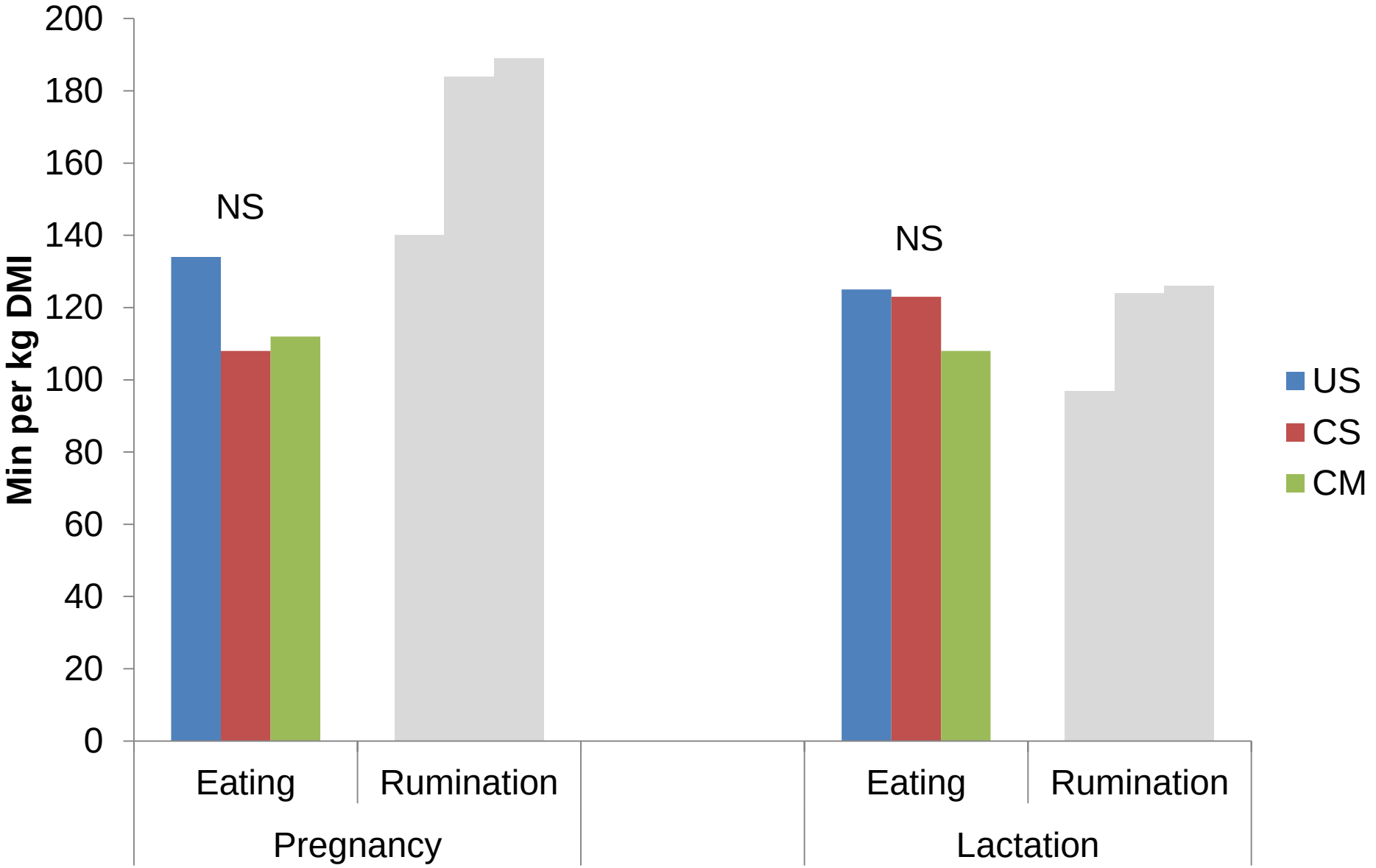
Feed intake, Exp. 2



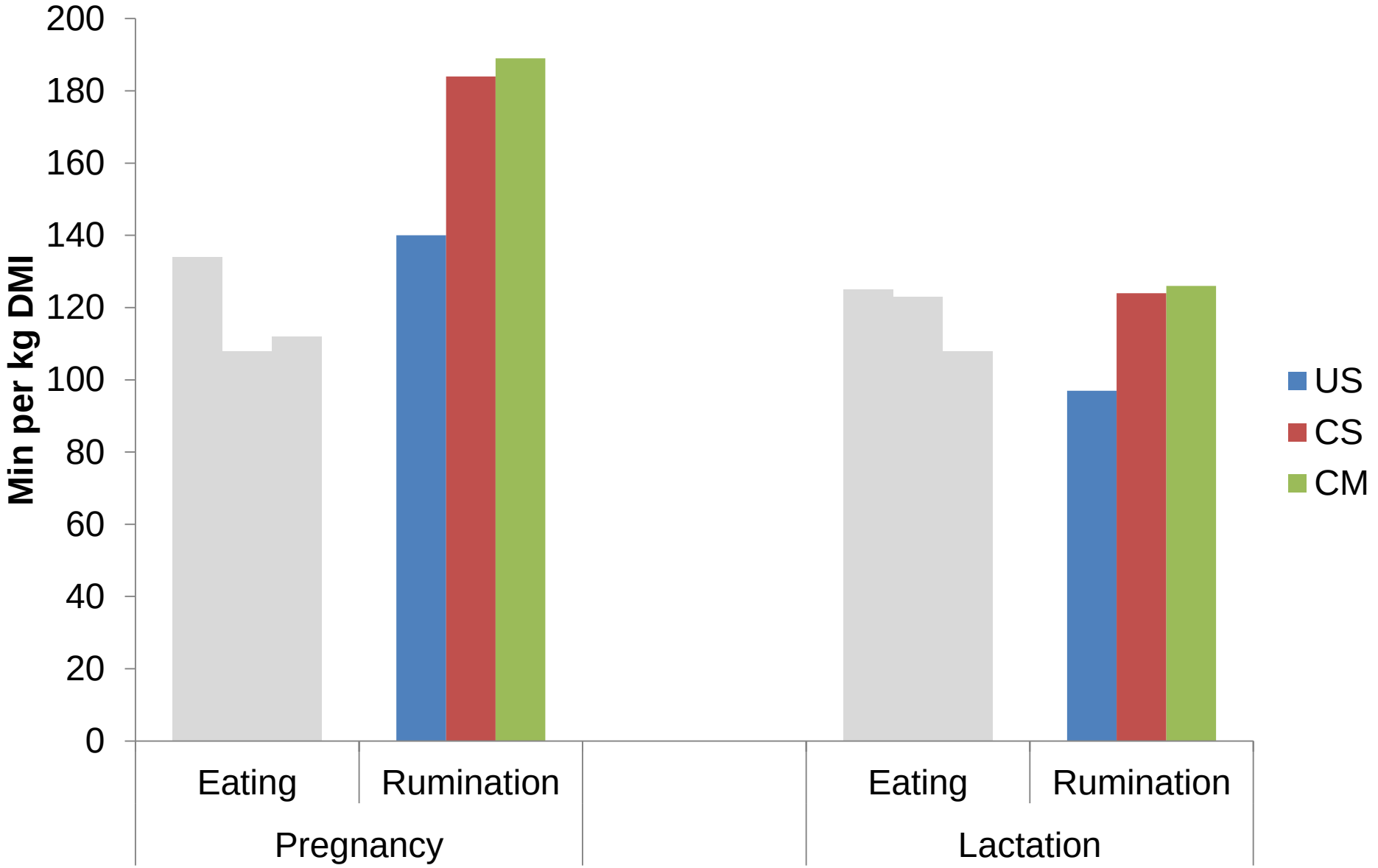
Chewing time, Exp. 1



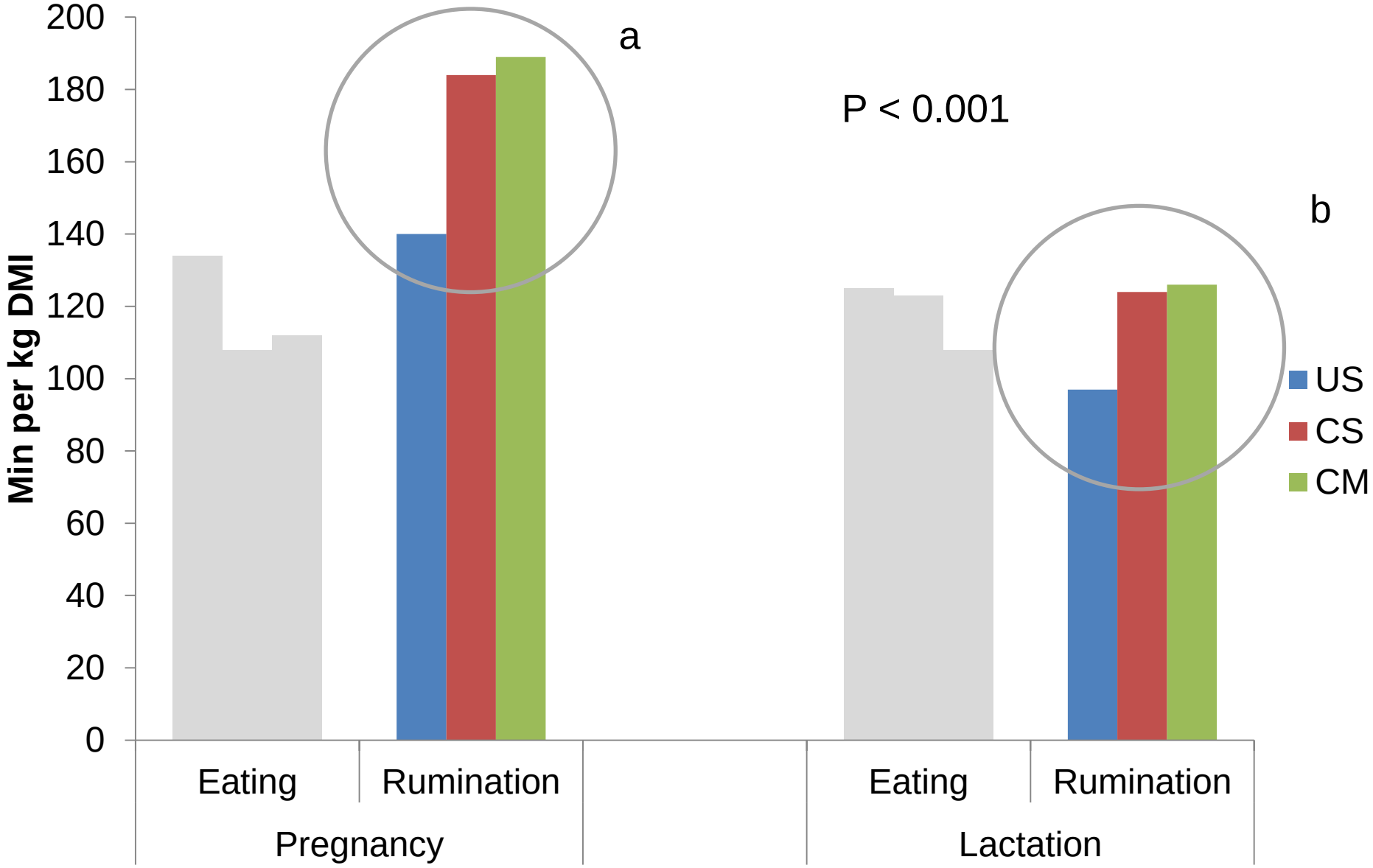
Eating time, Exp. 1



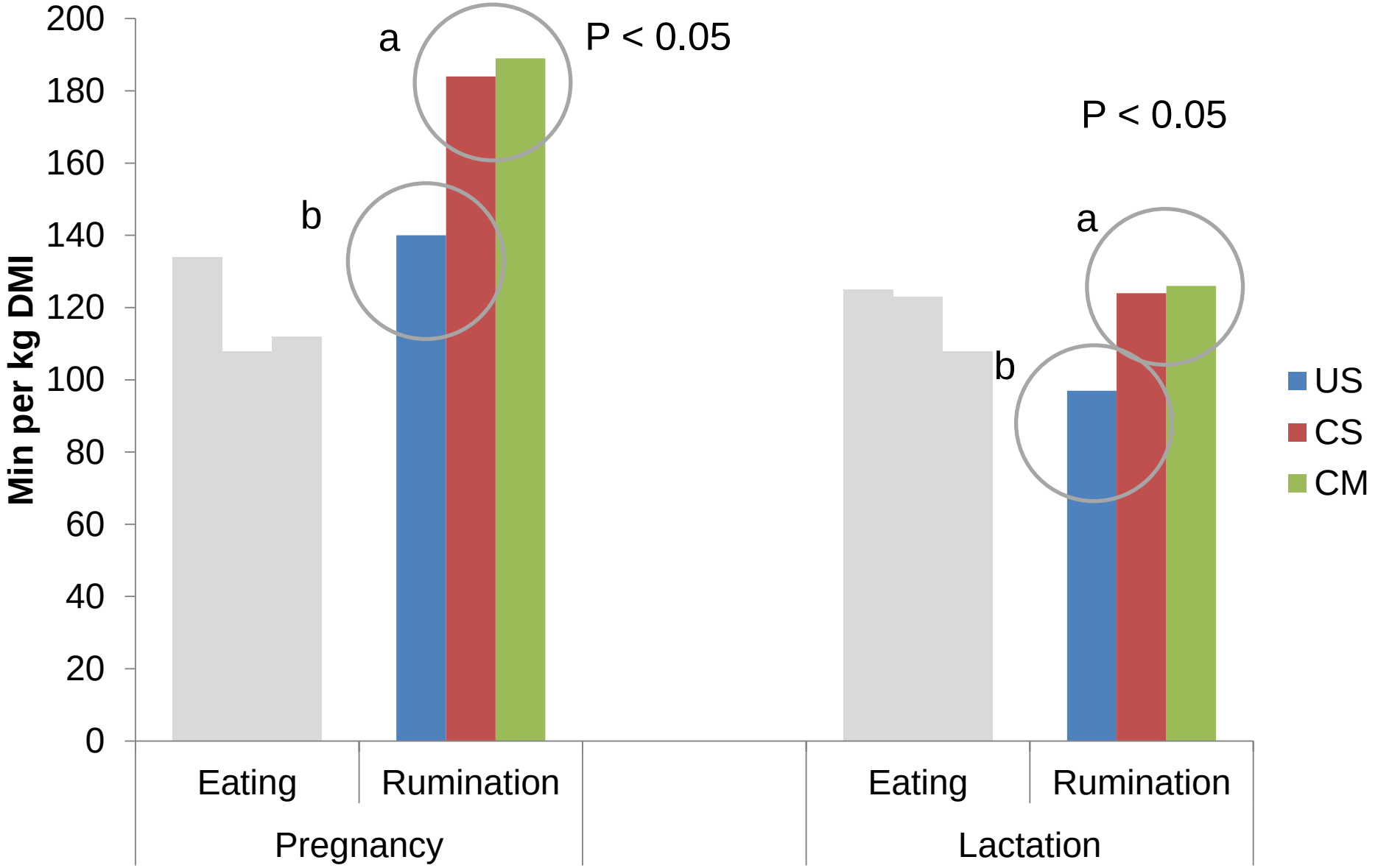
Rumination time, Exp. 1



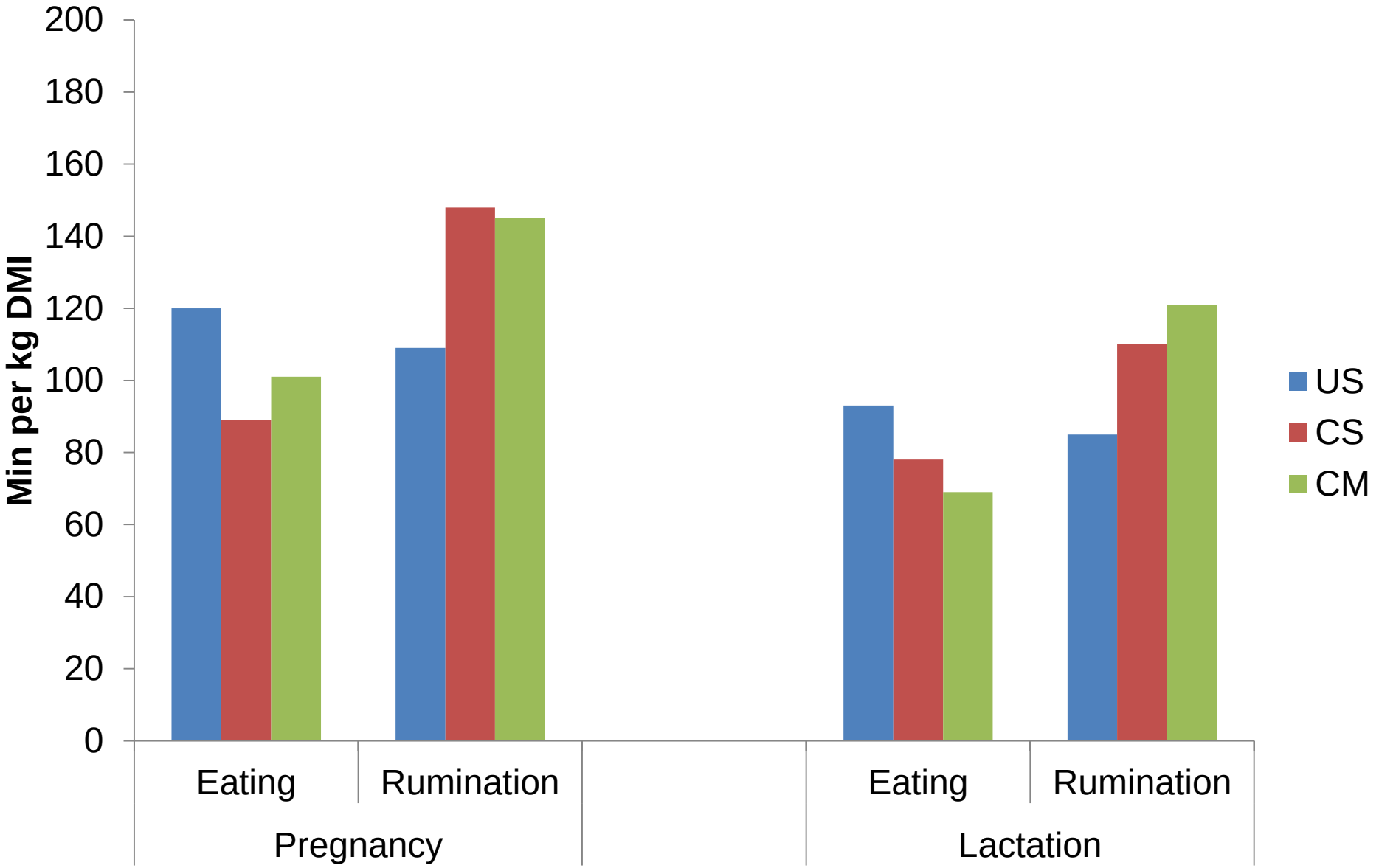
Rumination time, Exp. 1



Rumination time, Exp. 1



Chewing time, Exp. 2



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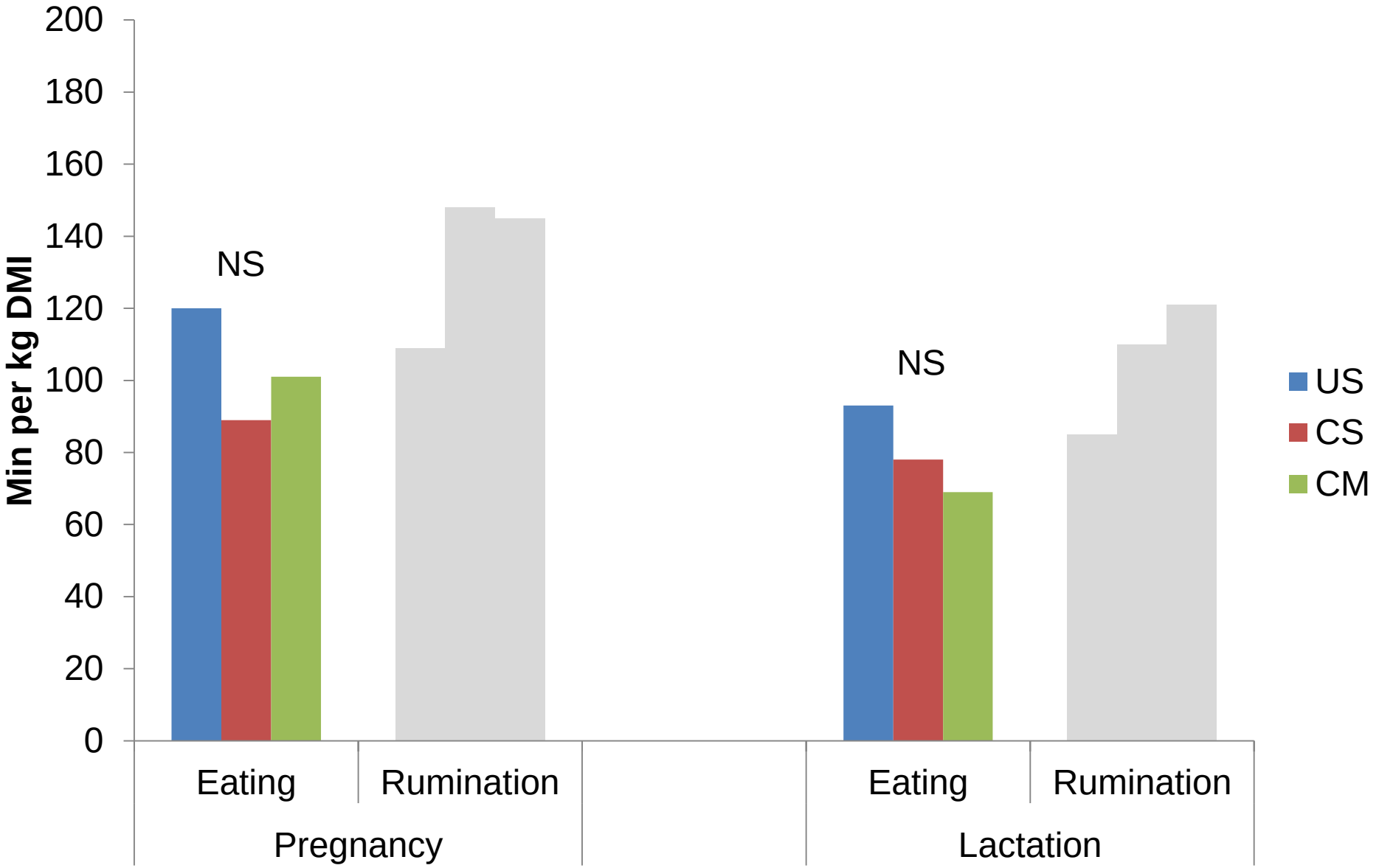

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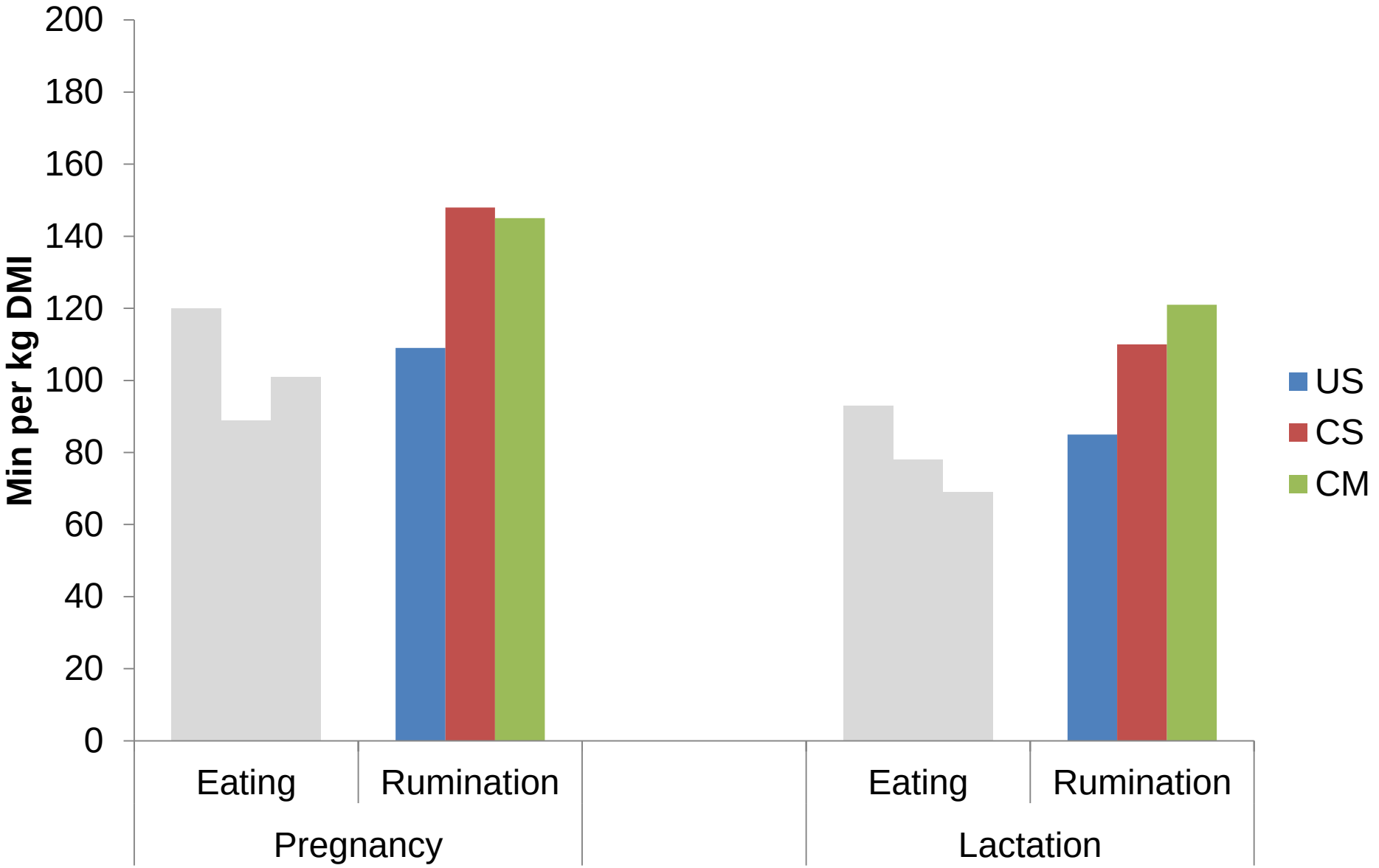

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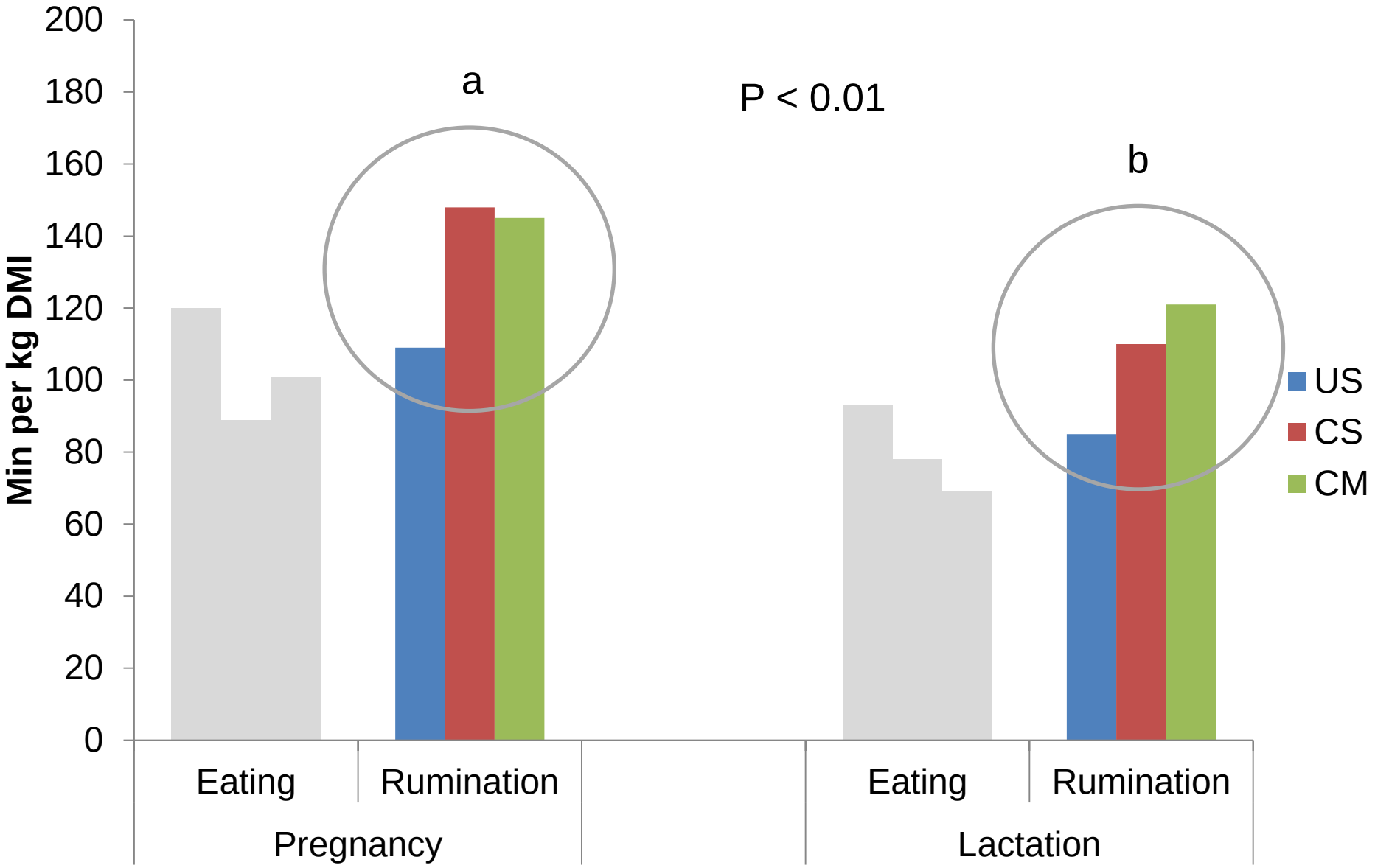

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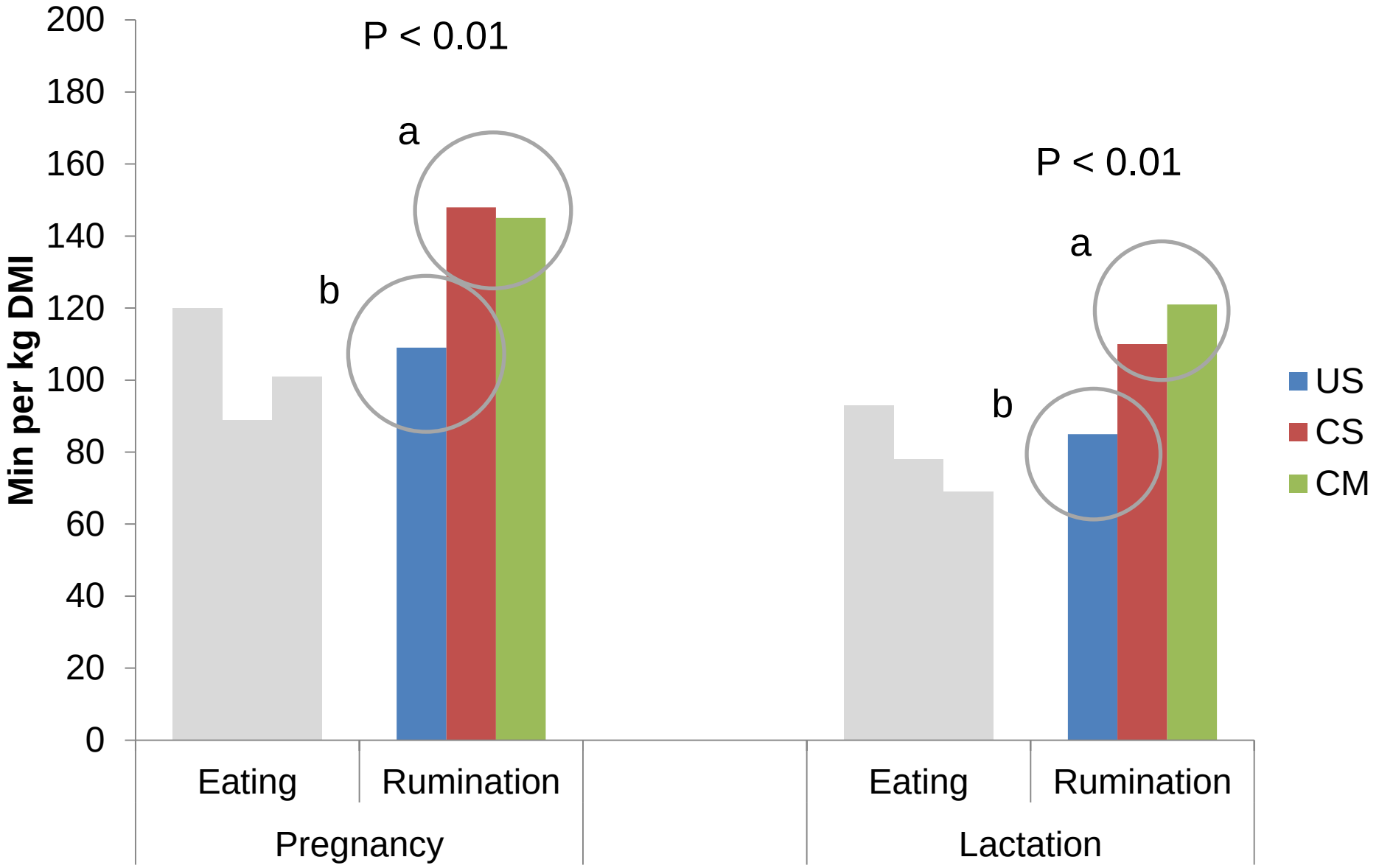

Conclusions

Chopping silage

- Increased ruminating time per kg DM intake

In lactation

Ewes had higher DM intake and spent less time ruminating per kg DM intake than in pregnancy

Intake was not affected by feeding treatments during chewing registrations

Acknowledgements

Project financed by:

- Swedish Farmers' Foundation for Agricultural Research
- The Swedish Foundation for Sheep Research
- Agroväst
- Swedish University of Agricultural Sciences
- University of Copenhagen
- Fåreafgiftsfonden

Stiftelsen Lantbruksforskning

AGROVÄST

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