Behaviour of Parda de Montaña cow-calf pairs in restricted suckling systems

J. Álvarez-Rodríguez, J. Palacio, I. Casasús, R. Revilla, A. Sanz*
CITA, Gobierno de Aragón, P.O. Box. 727, 50080 Zaragoza, Spain (*asanz@aragon.es)

**OBJECTIVE**

- To ascertain the maternal behaviour of Parda de Montaña cows (old Brown Swiss selected for beef purpose) managed under one or two suckling sessions (30 min/each) per day during lactation.

**MATERIAL AND METHODS**

- 16 multiparous autumn-calving cows (BCS at calving 2.6) with their calves (9 males - 7 females).
- Two restricted suckling systems from the day after parturition:
  - a. Once daily (0800 h) (RS1).
  - b. Twice daily (0800 and 1500 h) (RS2).

**MEASUREMENTS**

- Focal observation of behaviour trends during suckling (days 30, 66 and 100 postpartum).
- Live-weight weekly during lactation.

**RESULTS**

- Similar cow ADG during lactation (0.026 and -0.064 g/day in RS1 and RS2) (P>0.05).
- Longer suckling duration per day in RS2 (P<0.05) but similar calf ADG in both systems (P>0.05) (Figure).
- Significant correlation between suckling duration per session and number of butts towards cow udder (r=0.53; P<0.001).

<table>
<thead>
<tr>
<th>Variable #</th>
<th>RS1 (08 h)</th>
<th>RS2 (08 h)</th>
<th>RS2 (08-15 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow-calf close each other (min)</td>
<td>26.5a, x</td>
<td>23.8y</td>
<td>22.1b</td>
</tr>
<tr>
<td>Duration of first suckling bout (min)</td>
<td>17.3a</td>
<td>15.3</td>
<td>13.9b</td>
</tr>
<tr>
<td>Suckling duration per session (min)</td>
<td>21.3a</td>
<td>18.3</td>
<td>17.0b</td>
</tr>
<tr>
<td>Suckling bouts (number)</td>
<td>2.7</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Cross-suckling duration (min)</td>
<td>1.8</td>
<td>1.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Licks of cow towards own calf (number)</td>
<td>55.5</td>
<td>13.8</td>
<td>22.5</td>
</tr>
<tr>
<td>Licks of cow itself (number)</td>
<td>0.1b</td>
<td>1.0</td>
<td>2.7a</td>
</tr>
<tr>
<td>Butts towards cow udder per session (number)</td>
<td>46.3</td>
<td>45.4</td>
<td>42.7</td>
</tr>
</tbody>
</table>

# x, y indicate significant differences (P<0.05) between RS1 (08 h) and RS2 (08 h) and a, b between RS1 (08 h) and RS2 (08-15 h).

Similar duration of suckling in the morning session in RS1 and RS2 but greater on average in RS1.

Similar pattern of suckling and cross-suckling duration within sessions across systems.

More licks of cow itself in RS2.

Other activities as cow-calf playing (0.1 min/session) and exploring/eating straw bed (0.8 min/session) only registered in RS2.

**CONCLUSIONS**

- The cow-calf behaviour patterns observed were not altered by restricting suckling once daily, allowing the establishment of maternal bonding.
- Suckling once daily for at least 30 min is a handling practice without negative effects on cow-calf performance.

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