Lameness: What's New?

Marcia I. Endres
Jim A. Salfer

Does it cost money?

Is it painful???
Lameness prevalence in WI dairy herds

Cook, 2003
Is behavior of lame cows the same as non-lame cows?

Is there a difference in stall usage between cows in herds with mattress stalls and cows in herds with sand stalls?

Cook et al., 2004, JDS

Factors related to increased rates of lameness

- Reduced lying times
- Increased total standing time on hard surfaces
- Standing with the two front feet on the stall platform and the rear two feet in the alley (perching)

Cook et al., 2004
Study description

- 6 herds mattress, 6 herds sand
- Cows scored for locomotion
- 10-12 cows per herd were marked
- Tracked cows for a 24-hr filming period
- Recorded location, activity and time spent in each activity

Activities recorded

- Time lying down in stall
- Time standing up in stall, including perching
- Time standing up in the alley, including drinking
- Time up feeding
- Time up milking between departure and return to the pen
Herd characteristics

<table>
<thead>
<tr>
<th></th>
<th>Mattress</th>
<th>Sand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herd size</td>
<td>305</td>
<td>298</td>
</tr>
<tr>
<td>Cows in pen</td>
<td>77</td>
<td>96</td>
</tr>
<tr>
<td>Stocking rate</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>RHA</td>
<td>24,730</td>
<td>26,206</td>
</tr>
<tr>
<td>Turnover rate</td>
<td>36.5</td>
<td>28.8</td>
</tr>
<tr>
<td>Lameness prevalence</td>
<td>24.0</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Daily time budgets - base effect

- No difference in time lying down in stall (sand=12.01; mattress=11.66)
- No difference in time up in alley and up milking
- Mattress = longer time standing up in stall (1.61 h/d)
- Sand = greater time up feeding
What can be done?

- Build or redesign stalls to meet cows’ requirements and allow them to lie down and rise more normally
- Improve management factors that may be related to lameness
- Move lame cows to a special needs area with a comfortable surface – such as a composting bedded pack

Cook et al., 2004
www.extension.umn.edu/dairy

Doesn't this look comfy?