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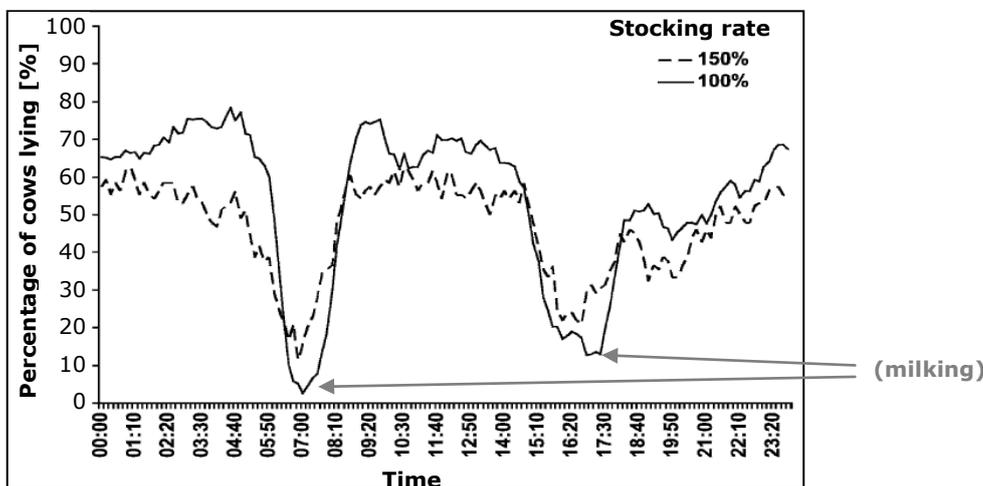
## EFFECTS OF OVERSTOCKING

Dairy cows spend 50 to 60% of their time lying. Physiological functions and animal health are adversely affected, if cows cannot lie sufficiently long. Poor claw health and abnormal walking behaviour can also be the result of the shortened lying times.

### Procedure:

It was the objective of the study to investigate the effect of overstocking on lying and standing behaviour. In 4 groups, each with 12 cows, 12, 11, 10, 9 or 8 cubicles were made available. With this, the stocking rate of 100 % could be compared with the stocking rates of 109 %, 120 %, 133 % and 150 %. Besides the lying and standing behaviour it was observed, how the overstocking affected the aggression behaviour, i.e. how often the cows displaced others from the cubicle.

### Results:



**Overstocking prohibits synchronous lying** and results in shorter total lying times

	Stocking rate				
	100 %	109 %	120 %	133 %	150 %
Lying time (h / day)	12.9	12.1	12.0	11.5	11.2
Standing with forelegs in the cubicle (h / day)	1.4	1.4	1.4	1.4	1.5
Standing outside the cubicle (h / day)	8.4	8.9	9.1	9.6	9.9
Time from milking to lying down (min)	39	34	38	28	26
Displacements from the cubicle (number / 5 h)	0.7	0.9	1.6	2.1	1.9

Significantly **shorter lying times of almost 2 hours** and longer standing times outside the cubicles

**Almost three times more often displacements from the cubicles with overstocking!**

### Conclusions:

1. If there are fewer cubicles than cows, then **the lying times are shorter and the cows stand increasingly outside of the cubicles**. Both attributes are **risk factors for claw diseases**.
2. **Overstocking promotes stress:** With overstocking the cows lie down sooner in the cubicles (indirect competition) and there were direct conflicts in the form of displacement from the cubicles.

Source: Fregonesi et al. 2007: Overstocking Reduces Lying Time in Dairy Cows. J. Dairy Sci. 90:3349–3354