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Own or shared silage feeding place for dairy cows?

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In new loose housing dairy barns the number of roughage feeding places is often limited. Cows are thus not able to eat all at the same time although; cattle tend to synchronize their feeding and resting behaviours. We studied behaviour, silage eating and milk production of cows when every animal had an own silage feeding place and when the feeding place was shared with two other cows.

Thirty-six Ayrshire cows were studied in two periods. Half of the cows had an own silage feeding place (Insentec, The Netherlands) at the first period and at the second period these cows shared their feeding place with two other cows. At every shared feeding place, one cow had calved three times, one two times and one once. Silage was available for all the cows *ad libitum*. Concentrate was offered during milking and at the automatic feeders. We registered cows' milk production, silage consumption and feeding behaviour. The position of cows was registered at 5 min intervals and social interactions between them were registered continuously. The statistical design was a cross over and SAS/mixed was used for statistical analyses.

Sharing the feeding place with two other cows had no effect on milk production or the amount of silage the cows ate. Cows that had their own feeding place tended to eat silage slightly more often than cows that shared their feeding place with two other cows (11.3 vs. 10.7 times a day, $P=0.12$). Cows that shared their feeding place tended to lie down more than cows that had their own place (60 vs. 56 % of observations, $P=0.10$). Agonistic interactions were more common among the cows that shared their feeding place. They were more often both active (15 vs. 11 agonistic interactions per cow, $P=0.05$) and passive (16 vs. 10 agonistic interactions per cow, $P<0.01$) in agonistic interactions than cows that had their own feeding place. Cows that had calved once were most of all passive ($P<0.01$) and least of all active ($P=0.05$) in agonistic interactions.

Sharing the feeding place with two other cows had hardly any effect on silage eating or production, but it increased agonistic interactions especially among young cows. The silage eating trough used in the study is sheltered and enables rather undisturbed eating for cows. Thus, the results are not as such applicable on farms with different types of silage feeding tables and different silage distribution methods.