

CALVING EASE

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Cross-sucking: Issues and Tips

- **Controlling cross-sucking is one of the ten farm-specific interventions that should be in place on any farm to prevent/control heifer mastitis. (De Vliegher)**
- **Before weaning in group-housed calves although much cross-sucking is concentrated in the 15 minutes before and after drinking more than one-third of this behavior seems unrelated to milk consumption.**
- **After weaning in group-housed calves there are large differences among calves in duration of cross-sucking with this practice frequently occurring between pairs of calves.**
- **Employing more than one technique for inhibiting cross-sucking both before and after weaning is more likely to succeed than depending on one treatment alone.**

What is cross-sucking among dairy heifer calves?

One calf engages in sucking body parts of another calf. Sometimes we see the muzzle, ear or skin near the head being sucked. Other times a calf may suck body parts under the belly of another calf such as navel or udder base. It may occur both before and after weaning.

Cross-sucking is considered “abnormal” behavior. It is not observed in calf-dam pairs. In a recent review of mastitis in dairy heifers the authors conclude the article with a 10-point program to prevent and control heifer mastitis. (De Vliegher and Others, 2012). The second point is to control cross-sucking in calves and young stock. Thus, we conclude that a best management practice in heifer rearing is to minimize cross-sucking.

When, how often and which calves?

Sucking behavior, either when penned individually or in groups, most often follows in the 10 to 15 minutes immediately following milk feeding among preweaned calves. When automatic feeders are used calves appear to engage in sucking behavior both before and after using the feeder. However, fully one-third of cross-sucking has been observed unrelated to milk feeding.

How often among preweaned calves? Sucking of some kind, including housing and equipment, is very common; probably approaching 80 or 90 percent. This behavior tends to extinguish itself fairly rapidly post milk feeding.

Large differences among individual calves have been seen in cross-sucking both preweaning and weaned. One report said that 25 percent of their calves accounted for over 2/3rds of the cross-sucking. Another report suggested that this is habitual behavior and often takes place among pairs of calves.

Tips for prevention and control

Housing individually rather than in groups is an obvious way to go. But, for group housing systems not possible. A few places have headlocks at the feeding stations. The calves are left locked up for 10 to 15 minutes after milk feeding resulting in very low rates of sucking on anything. Regardless of feeding method (mob vs. ad lib acidified vs. automatic) the availability of a teat to suck on reduces cross-sucking. Restricted feeding programs tend to have higher rates of cross-sucking than those milk feeding programs that provide more liberal amounts of milk (e.g., 8 quarts or more).

Frequent observation of calves appears to be important in controlling cross-sucking. Watching calves for repeated behavior should identify a small number of calves cross-sucking. While reliable data on large numbers of calves are not available it may reasonable to estimate that less than 20 percent of the calves account for at least 80 percent of this undesirable behavior. Especially among weaned calves where much of the cross-sucking stops, calves habituated to this practice may increase their duration of cross-sucking. Mechanical devices may have to be used on both calves in the pair to stop their behavior. Try searching the internet using “dairy calf weaner”.

References: De Vliegher, S. et al., “Invited Review: Mastitis in dairy heifers: Nature of the disease, potential impact, prevention, and control.” *Journal of Dairy Science* 95:1025-1040; de Passille, A.M. et al., “Cross-sucking in dairy calves may become habit or reflect characteristics of individual calves more than milk allowance or weaning,” *Applied Animal Behaviour Science* 133:137-143; Laukkanen, H. et al. “Which calves are cross-sucked?” *Applied Animal Behaviour Science* 125:91-95; de Passille, A.M. et al., “Cross-sucking and gradual weaning of dairy calves” *Applied Animal Behaviour Science* 124:11-15; Roth, B.A. et al. “Temporal distribution of sucking behavior in dairy calves and influence of energy balance,” *Applied Animal Behaviour Science* 119:137-142; Jensen, M.B. and M. Budde, “The effects of milk feeding method and group size on feeding behavior and cross-sucking in group-housed dairy calves,” *Journal of Dairy Science* 89: 4778-4783; de Passille, A.M. et al. “Designing good environments and management for calves” *Advances in Dairy Technology* 16: 75-89; Jensen, M.B. “The effects of feeding method, milk allowance and social factors on milk feeding behavior and cross-sucking in group housed dairy calves” *Applied Animal Behaviour Science* 80:191-206; Jung, J and L. Lidfors, “Effects of amount of milk, milk flow and access to a rubber teat on cross-sucking and non-nutritive sucking in dairy calves,” *Applied Animal Behaviour Science* 72:201-213; Lidfors, L. “Cross-sucking in group-housed dairy calves before and after weaning off milk” *Applied Animal Behaviour Science* 38:15-24; Wennekamp, Ryan “Cross-sucking in group housed calves separated from their mothers” <http://www.usask.ca/wcvm/herdmed/applied-ethology/behaviourproblems/cross-suck.html>

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