Cross Sucking Revisited: Issues and Tips

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.

Why be concerned about cross sucking?
Cross-sucking is considered “abnormal” behavior. In a review of mastitis in dairy heifers published in 2012, the authors conclude the article with a 10-point program to prevent and control heifer mastitis. (De Vliegher and Others). The second point in this program is to control cross-sucking in calves and young stock.

However, more recent work (2016) specifically followed calves through their first lactation. These data showed that with limited exposure to cross sucking there were no long-term negative results. “Being cross sucked did not appear to influence the likelihood of developing mastitis in the first lactation in comparison to individuals who were not cross sucked. Additionally, no incidence of udder damage was observed nor was milk production during the first lactation significantly less in cross-sucked individuals” (Vaughan, p5602). ["Udder damage” was defined as damaged teats or non-milking quarters.”]

What is our management challenge?
To date the data seem to say that our management challenge is to identify long-term partners in cross-sucking that provide extended exposure to cross sucking on the udder base. Nearly all of the long-term cross sucking issues in the research cited here was concentrated in 3 pairs of heifers (out of 56 animals).

This suggests that close observation of post-weaning pens between 3 to 5 months post weaning may be productive in finding these chronic pairs. “Cross-sucking pairs appeared to
develop over time. In the last 3 observation periods after weaning (during age in days of 82 through 156 days) calves that did the most cross sucking tended to be those that were cross sucked the most.” (Vaughan, p 5601). Thus, we are looking for pairs of calves.

When, how often and which calves cross suck?

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 very rapidly post milk feeding.

Nevertheless, large differences among individual calves have been seen in cross-sucking both pre-weaning 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 preweaned calves individually rather than in groups is one solution.
- For group housing systems? 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 the feeding method in group housing (mob vs. ad-lib acidified vs. automatic) the availability of an artificial 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 daily).
- Frequent observation of calves appears to be important in identifying the partners in cross sucking. Watching calves for repeated behavior should identify a small number of calves that are cross sucking.
- Where housing alternatives are available, separating cross-sucking pairs may be effective in stopping 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”.


Remember to search for “Calves with Sam” blog for profit tips for calf rearing.