

Tail Docking in Dairy Cattle

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Introduction

The practice of tail docking dairy cows originated in New Zealand and has been increasing in U.S. dairy herds. A variety of benefits have been attributed to tail docking including improved comfort for milking personnel, enhanced udder cleanliness, and improved milk quality. However, the actual benefits of the practice and the impacts on the animals' welfare have been questioned.

Regulatory policies regarding tail docking vary from country to country. Tail docking is prohibited in Denmark, Germany, Scotland, Sweden and the United Kingdom. Some Australian states prohibit the procedure, but others allow it only if performed by a veterinarian for udder health reasons. Canadian guidelines recommend that competent personnel conduct the procedure and the Canadian Veterinary Medical Association officially opposes routine tail docking of dairy cattle. In the U.S., there are no federal or state laws or regulations regarding tail docking of cattle, but recently (2004) the American Veterinary Medical Association (AVMA) approved a new position statement as follows:

“The AVMA opposes routine tail docking of cattle. Current scientific literature indicates that routine tail docking provides no benefit to the animal, and that tail docking can lead to distress during fly seasons. When medically necessary, amputation of tails must be performed by a licensed veterinarian.”

Methods Used to Dock Tails

Producers in the U.S. frequently dock heifers near weaning or approximately one-month prior calving. The most common docking method is amputation by rubber band constriction. The banded tail becomes necrotic and detaches between 3 and 7 weeks post-banding. Typically, one-third to two-thirds of the tail is removed.

Scientific Data and the Issues

The intensity and duration of pain associated with docking is a welfare concern. In one study involving 3 to 5-week old calves, tail sensitivity to heat was absent by 60 to 120 minutes post-banding. In another study, cows continued to graze "apparently unconcerned" immediately following banding. In a third study, similar discomfort behaviors (restlessness, tail shaking and/or vocalization) were exhibited for a duration of 1 hour after banding, but these behaviors were delayed approximately 2 hours in the group of calves administered anesthesia (lidocaine) for pain relief. Collectively, these studies suggest that tail docking by banding causes mild discomfort of limited duration, and there is little or no apparent benefit gained through the use of anesthesia.

Swishing of the tail effectively eliminates fly predation. In several studies, there were no differences in the level of fly avoidance behaviors on the front of cows (shoulder skin rippling, front leg stamping or head turning), but rear avoidance behaviors (tail flicks and rear leg

stamping) were more frequent in docked cows than cows with intact tails. In addition, more flies were present on the rear of the docked cows than cattle with intact tails. The results show tail docking interferes with normal fly avoidance behavior and is detrimental to the cow's welfare.

A variety of benefits have been attributed to tail docking including improved cow cleanliness, udder health, milk hygiene, and milk production. Proponents of tail docking maintain that docked cows remain cleaner since a tail would not be present to spread manure on the rear end and udder. A recent study examined the effect of docking on cow cleanliness in 413 cows housed in free-stalls. Cleanliness of the body and udder were evaluated by recording the number of soiled squares and the severity of the soiling on a scale from 0 (clean) to 3 (thickly caked). No differences were found in cow cleanliness, udder cleanliness, or somatic cell count. In another study, cows with docked tails were cleaner in the area immediately adjacent to the base of the tail, but all other areas (including the udder) were not cleaner in the docked animals.

A common alternative to tail docking in dairy cows is switch trimming. In a study comparing docking, switch trimming, and intact tails, the proportion of flies on the rear quarters of switch trimmed cows was intermediate between cows with intact or docked tails. A compromise for milking personnel comfort might be achieved by trimming the switch in the spring (when the tail was more likely to be dirty) and allowing it to grow back over the summer (when fly numbers are highest).

Historically it was thought that tail docking might reduce the risk of dairy farm workers contracting leptospirosis from infected cattle. The disease was initially referred to as "Dairy Farm Fever" and "Milker's Fever." Leptospirosis is endemic in U.S. cattle herds. The organism's ability to penetrate skin can lead to infections in humans having routine contact with cow urine. In one study, it was found that milkers' leptospiral titers were not related to tail docking. Vaccination of dairy cattle remains the most important precaution in the prevention of leptospirosis in dairy cattle and possible transmission to dairy workers.

Conclusion

A review of scientific literature suggests that the tail docking procedure causes minimal, transient discomfort to cattle. In facilities with higher fly densities, docked animals experience a significant increase in fly predation. Available data does not support claims that docking improves the comfort or health of milking personnel, the cleanliness of the udder, or improved milk quality. Switch trimming may provide a compromise for milking personnel's comfort and fly avoidance behavior of the cow.

Source: "Evaluation of the Scientific Justification for Tail Docking in Dairy Cattle."

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Cow with docked tail.