

CALVING EASE

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TO WASH OR NOT TO WASH

For calf raisers that bottle-feed milk or milk replacer to calves this question really doesn't apply. All the bottle feeders I know wash bottles between each feeding. But, that's not true for calf raisers that bucket feed milk to calves. There is a reasonable chance that this ten-day-old calf's milk may be contaminated by this pail at each feeding.



Let me start the discussion by saying that I'm not familiar with any scientifically valid study that has compared the consequences (calf mortality, sickness, growth) of either washing milk feeding buckets between each feeding or assigning this bucket to a calf to be used continuously without washing until she is weaned. Maybe a reader knows of such a study and can enlighten all of us.

The practice of washing milk feeding buckets between each feeding ought to be fairly obvious. Each calf receives her milk in a clean bucket each feeding, the buckets are collected and washed after each feeding. But not so obvious is the wide variation from

farm to farm in the quality of the washing procedures. For some, washing means squirting a hose in the general direction of the pails until they all contain some water. At the next feeding they are dumped out and used to feed calves. Others follow the recommended “rinse-wash-rinse-dry” protocol that results in very low bacterial regrowth levels. [This protocol is at www.calffacts.com, “Washing milk containers: Protocol.”]

The practice of not washing buckets is a little more complicated. Generally “not-washing” means that a calf to be housed in an individual pen/hutch is given a clean pail when she arrives. In most operations that same pail remains there until the calf is weaned and moved away to group housing. All operations replace soiled pails as needed.

Frequently this same pail is used for feeding water as well. At least for calves that have consumed all of their milk water is added to the pails shortly after each feeding (assuming non-freezing conditions). Just prior to the next feeding the water is dumped and the pails are ready for milk feeding. I’ve cultured samples of this water in order to measure the presence of coliform bacteria. All I know for certain is that in some situations the water in these pails between feedings contains a high concentration of scours-causing bacteria. I have not canvassed a large number of different farms and sampled water from “non-washed” pails. Maybe there are situations where the bacteria counts are low and others similar to the ones I have already sampled.

I have sampled milk replacer on several farms just prior to feeding and then from the calf pail prior to the calf starting to drink. The most common pattern of bacteriological results is a low coliform count prior to going into the feeding buckets and counts over 100,000 cfu/ml from the milk once it is in the pail. So, at least in some settings the unwashed pails can serve as a reservoir of coliform bacteria.

What’s Recommended?

If you are not washing pails and your scours frequency and/or duration is unacceptable, then one place to make a change is to wash some buckets. Some farms wash all buckets between every feeding. Others wash all buckets between every feeding for the younger calves but not the older ones. A common pattern is to scrub pails for all the calves less than ten to fourteen days of age. Older calves then are assigned a pail that stays with them for the rest of the preweaned period.

Another compromise is the repeated use of a small number of buckets to feed all the milk. That is, while all the milk buckets are washed after every feeding only a small number of pails are used to feed all the calves. Usually in these cases the youngest calves are fed first with the clean pails. Then once the buckets have been used once they are refilled and used to feed the next batch of older calves. This way clean pails are used every feeding but repeated use does increase the chances of transmitting pathogens from calf to calf. I’ve watched this routine and observed that pails from known treated/sick calves are pulled out of use and clean pails added.

Enough avoiding the question, what do you recommend?

Careful observation of calf mortality, sickness and growth are the keystones of making an informed decision about how to manage this important sanitation issue. If you are meeting your goals for calf management (death rate, sickness rate, growth rate) then leave things alone. However, if one or more of these measures of profitability are unacceptable then feeding sanitation may be one route to reduced expenses (death, treatment of illness) and greater returns (growth rates). You may want to access the resource, "Feeding more milk without scours" at the www.calffacts.com site. Click [HERE](#) to go to this resource if you are reading this online.

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