



Calving Ease

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TO WASH OR NOT TO WASH Who Knows the Answer?

For calf raisers that bottle-feed calves milk or milk replacer 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.

Some Do. Some Don't.

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, "properly" 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, thank heaven, follow the recommended "rinse-wash-rinse-dry" protocol that results in very low bacterial regrowth levels.

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. I can't remember finding a sample under 50,000 colony forming units per milliliter (cfu/ml, a number similar to a standard plate count). I just looked up the results on the last sample in this month and it was well over 100,000 cfu/ml in fecal coliform contamination. 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 yet 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. Other producers wash all the pails after the morning feeding and just rinse them out following the afternoon feeding.

Still 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 fifteen to twenty 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 after 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 treated/sick calves are usually 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, feed conversion) and greater returns (growth rates).

Calf Feeder's Tip

In his Calf Note 91 Jim Quigley makes an observation that should be just common sense but is often ignored. See <http://calfnotes.com> and click on "Calf Notes in Order" for CalfNote 91. Jim points out that if one is feeding a milk replacer containing antibiotics it is not profitable to also feed probiotics at the same time. The antibiotics just cancel out the probiotics. Net gain is zero.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to Calving Ease, 11047 River Road, Pavilion, NY 14525 or to **CALL** either 585-591-2660 (Attica Vet Assoc. office) or 585-343-8128 (Offhaus Farms Office) or **FAX** (585-591-2898) or **e-mail** sleadley@frontiernet.net or pams91@2ki.net. A limited number of back issues may be accessed on the Internet at <http://www.calfnotes.com> and clicking on the link, Calving Ease.

For reprints of Calving Ease, write to Calving Ease, 11047 River Road, Pavilion, NY 14525. Order by date or title. Prepaid orders only. Please make check or money order payable to Sam Leadley. The first reprint title costs \$1.00. Additional reprint titles when requested in one order cost an additional \$.50 each. Full sets of reprints (10 yrs) are \$40.

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Sep,'00 Scours in Two-Week Old Calves

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