

Calving Ease

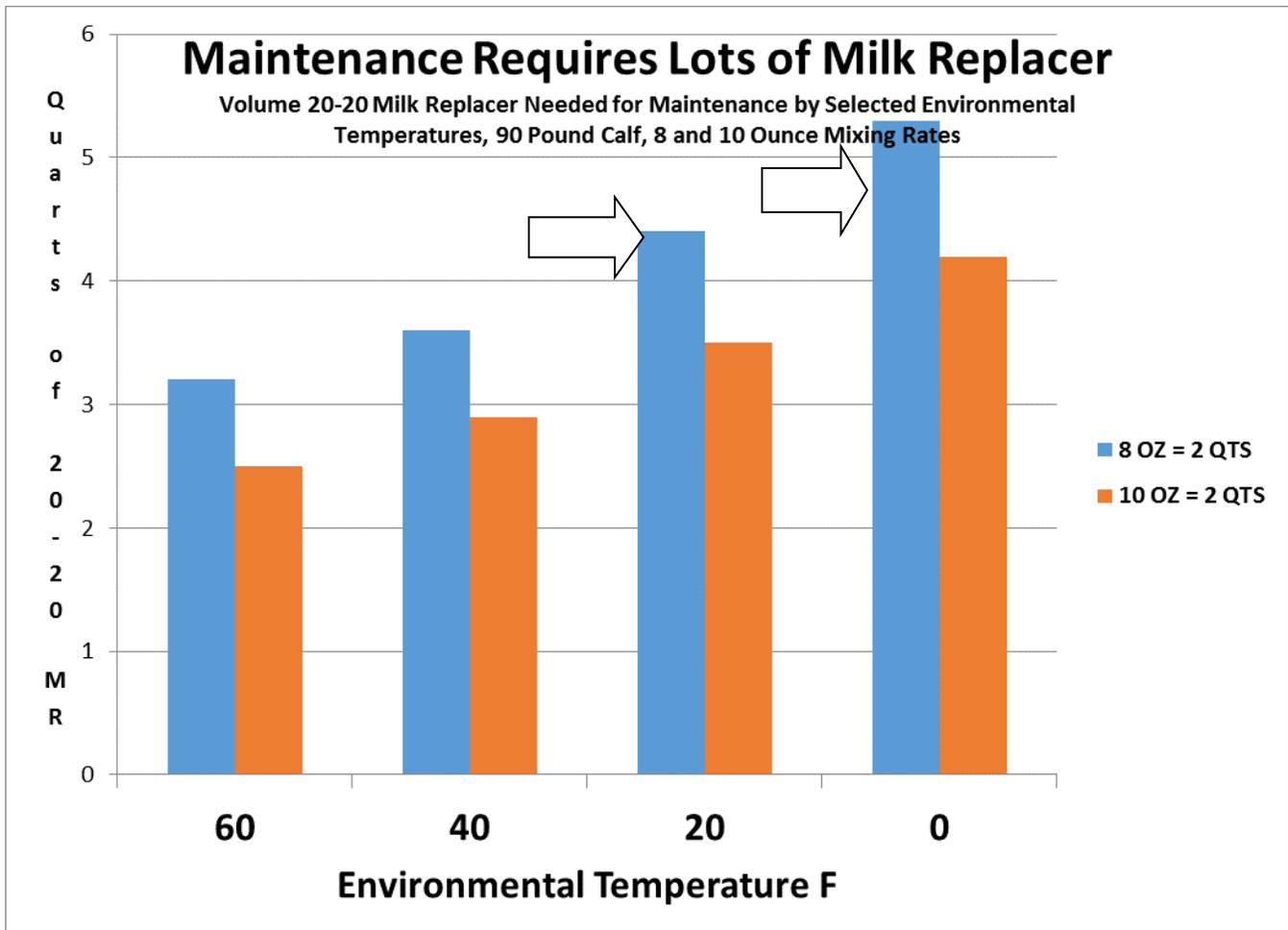
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By Sam Leadley and Kazzie Nero



Feed for more than Maintenance!

- **Maintenance** = keep core body temperature at 101°F, replace cells, eat and breathe.
- **Growth** = make new cells to support immunity and get bigger.
- For our youngest calves, as environmental temperatures fall below 60°F they burn energy to maintain core body temperature.
- In order to improve immunity to replace protection from colostrum, our youngest calves need lots of energy beyond maintenance.



Meeting the Maintenance Needs of a calf - Read the chart.

At the bottom is easy to see that as you read from left to right the environmental temperature goes down from 60 (this is called thermo-neutral for newborn calves) to 0.

See how all the bars get taller as the environmental temperature goes down. At 60°F for this 90-pound calf, the graph shows slightly over 3 quarts daily of 12.5% solids 20-20 milk replacer is needed just to meet maintenance needs. **Notice how this volume goes up over 4 quarts daily when the temperature drops below freezing (see arrows).** Yes, that is correct. **We should expect a 90-pound calf to lose weight** on a 4-quart a day ration in this cold environment.

Energy and Immunity

Initially, we can do a good job of feeding colostrum – that provides both energy and immunity. However, immunity from colostrum fades rapidly. We need to do an equally good job of providing enough energy after birth to make lots and many new cells to build her own immune system.

Feeding more energy – especially to our youngest calves

- If you are feeding milk replacer, consider mixing it at 15 percent solids (10 ounces makes 2 quarts) rather than 12.5 percent solids (8 ounces makes 2 quarts). Even under less than ideal sanitation, 15 percent solids usually poses little risk for digestive upsets.
- Increasing your feeding volume per day. Every year sometime between Thanksgiving and Christmas Sam's calves up to two weeks of age were moved up from two to three feedings daily. He chose to feed two qts. AM, 1 qt. at noon, 2 qts. PM. That is a 25% increase! "But," you say, "Every time I feed more milk my calves get scours!" Look at the resource, <http://atticacows.com/library/newsletters/FeedingMoreMilkwithoutScoursR1945.pdf> for ideas to make higher milk feeding rates practical. [Click [HERE](#) for resource].
- If you are not feeding whole milk, consider feeding more fat to milk replacer. One choice is to select a higher fat milk replacer. For example, look for 24 percent fat (24-24). They often use names like Winter Star and Winter Blend. Another way is to use a fat supplement with a 20 percent fat milk replacer (24-20). One example of this is the product SuperCalfKit; there are numerous ones on the market. The concentrated dry fat powder product is simply mixed into the regular milk replacer at feeding time.
- For the very youngest calves (<10 days), if practical collect and feed transition milk (first six milkings after calving). When Sam had a special needs parlor, he was able to do this most of the winter months since he had free "outdoor" refrigeration. He fed this to the youngest calves as long as the supply permitted. Once he ran out of this milk, calves switched permanently to milk replacer. They seemed to make the change without digestive upsets.
- One last caution – When temperatures go down and stay below 20°, use caution when teaching calves to drink from a bucket. By carrying full nursing bottles (4 to a 5-gallon pail) in hot water he bottle fed newborns for the first full week before trying to teach them bucket drinking. Kazzie want to remind us that cold stress and skipping feedings that often accompany bucket training do not go well together. Just do not skip feedings, period.

Thanks to Attica Veterinary Associates, P.C. for sponsoring this issue of the calf management newsletter.

For more calf management resources, go to www.calfacts.com.

Have you visited the "Calves with Sam" blog for snips of calf news?