Antibiotics in Milk Replacers: Changes Coming Soon

Are you feeding milk replacer to preweaned calves? Have you been using antibiotic-medicated milk replacer to manage bacterial scours in calves? Soon these products will not be available in the same formulation as in the past.

By next August companies that make milk replacer must stop selling products that contain “a two-to-one ratio of Neomycin to Terramycin.” These milk replacers will still be available for an indefinite period while current supplies are used up.

New formulas expected

All antibiotic medications must be added to milk replacers at a new 1:1 ratio; equal parts of Neomycin and Terramycin (oxytetracycline). The new formulations probably will specify dosage based on live weight of calves rather than the inclusion rate at which the antibiotic is added per ton. If you have a medicated milk replacer bag tag it will show the inclusion rate that is the present practice.

Right now it looks like there will not be products that can be fed on a continuous basis that will significantly reduce either intensity or duration of scours.

Why should I care about these changes?

Think back to the recent past. Have you had a time when you fed non-medicated milk replacer? Perhaps you are feeding a medicated one now. Can you recall if there was a difference in the duration and/or intensity of calf scours between the two replacers? Is the answer, “No”? If this is the case your current success in controlling scours probably does not depend on the medication in the milk replacer. Don’t be concerned with these medication changes.

But, is your answer, “Yes”? Your calves did better on the medicated product than when fed the non-medicated milk replacer. If this is the case it may be profitable to look for improvements to make to your calf care program so it is practical to use a non-medicated replacer.

Look for improvements to make now

Doing a better job of feeding colostrum to improve immunity. 
The best management practices in colostrum management include:
• Evaluating effectiveness of the colostrum feeding program – blood serum total protein testing [see www.atticacows.com in Calf Facts section, “Testing for passive transfer of immunity” for a description of this test].
• Feeding four quarts of colostrum to newborn calves (large breed).
• Feeding colostrum soon after birth, aim for ninety percent fed within four hours. Sooner is always better.
• Evaluating of colostrum quality with a Colostrometer™ and feeding the highest quality colostrum to newborn heifer calves.

Providing better nutrition for preweaned calves to improve immunity.
Feed milk or milk replacer for young calves at a seasonally-appropriate rate to support at least one pound daily gain. For example, we estimate that it takes about seven to eight quarts of 20-20 milk replacer daily to support roughly one pound of gain for a 90 to 100 pound calf in winter (average 20 degree environment).

Monitoring bacteria exposure through colostrum and milk replacer.
Collect “as-fed” samples and freeze them. Send them to a laboratory for bacteria culturing. Have the laboratory both speciate and quantify the results. We are looking for bacteria content of “as-fed” colostrum and milk replacer samples of coliform counts under 5,000 cfu/ml and total plate counts under 50,000 cfu/ml.

Keeping equipment that comes in contact with colostrum and milk replacer clean.
The protocol is:
• Rinse with lukewarm water
• Wash with hot water (over 120 degrees), detergent, chlorine bleach and brush.
• Rinse with acid
• Dry
See www.atticacows.com in the Calf Facts section for Washing Checklist.

Keeping newborn calves away from adult cow manure.
Review your calving management which include cleanliness of the calving area, length of time the calf remains with the dam and housing the calf in as clean an environment as possible.

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 585-591-2660 (Attica Vet Assoc. office) or FAX (585-591-2898) or e-mail calvingease@rochester.rr.com.
A limited number of back issues may be accessed on the Internet at either www.atticacows.com or www.calfnotes.com and clicking on the link, Calving Ease.

Our thanks to Alpharma for supporting this issue of Calving Ease.

Just an announcement: Attica Veterinary Associates, P.C.’s lab has now added bioPryn blood testing to services that are available. For more information read on or visit www.atticacows.com for submission forms.
• **What is BioPRYN®?**
  BioPRYN® is a blood pregnancy test for ruminants, and has specific appeal for the commercial U.S. dairy and beef industries because it delivers fast, accurate, safe and economical pregnancy diagnostic results. The technology works on all ruminants, including cattle, sheep, goats, bison, deer, elk and moose. A specific test using ELISA technology, which produces fast results and has been developed for use exclusively in cattle.

• **How does BioPRYN® detect pregnancies?**
  BioPRYN® evaluates the blood (more specifically, the serum or plasma) of ruminants for a protein called Pregnancy Specific Protein B (PSPB). PSPB is produced by the placenta, and therefore pregnant animals will have the protein in their blood. This makes the test more accurate than earlier attempts at pregnancy diagnosis that evaluated blood or milk for progesterone or other hormones that can occur in normally cycling animals.

  The test uses enzyme-linked immunosorbent assay (ELISA) technology for processing, which contributes to its low cost and fast turn-around.

• **Visit [www.atticacows.com](http://www.atticacows.com) for more information and submission forms.**

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Diagnosing respiratory illness in preweaned calves can be made more consistent and easier with a picture guide provided at this web site: [http://www.vetmed.wisc.edu/dms/fapm/fapmtools/8calf/calf_respiratory_scoring_chart.pdf](http://www.vetmed.wisc.edu/dms/fapm/fapmtools/8calf/calf_respiratory_scoring_chart.pdf)

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