

# **Coccidiosis and The Three-Week Old Calf**

Coccidia seem to be everywhere on nearly every dairy farm. One of the reasons for this is that the eggs or oocysts that are shed in an infected animal's manure stay alive for a long time. In damp, dark and dirty conditions they survive for years. It's reasonable to assume that any place where there have been dairy heifers and cows in the past ten years is thoroughly contaminated with coccidia oocysts. Nearly every heifer calf is exposed to them by the time she is a day or two old.

## **How much time do I have before my calf is clinically ill?**

Remember that this parasite has a twenty-one day life cycle. The worst part of its intestinal damage is in the last half of this cycle. The next generation of eggs or oocysts is not passed in the feces until about twenty-one days after the original eggs were eaten by the calf. This means we have some time to respond to this parasite challenge before she is clinically ill with coccidiosis.

## **Are there drugs to control coccidiosis?**

There are proven means to control this infestation. The most commonly used coccidia control drugs available in USA are Deccox®, Bovatec®, Corid® and Rumensin®. The first two are available as part of milk replacer and starter grain. Corid is available either as a liquid (e.g., gallon containers) or as a crumble. Rumensin is available as part of starter grain. When fed according to instructions they effectively control coccidia populations in calves and heifers.

## **How do I use a coccidia control drug?**

Use the coccidia control drugs as recommended by the manufacturer. Many of us now feed milk replacer medicated with one of these coccidiostats. We have to remember, however, that the recommended feeding program for effective coccidia control is to increase the amount of medication or medicated milk replacer fed as the calf grows.

Why more medication as the calf grows in order to get effective control? The coccidiostat dose is figured on the basis of the size of the animal. That is, so many

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milligrams of medication per one hundred pounds of calf live body weight. The most common recommended feeding rate for medicated milk replacer is ten percent of body weight. This will provide enough medication for effective coccidia control.

Let's figure out what ten percent comes to. For an eighty-pound newborn calf that is eight pounds or about four quarts of milk replacer daily. (Four quarts of milk replacer weighs approximately 8.6 pounds.) But, for a hundred and five-pound calf that comes to ten and one-half pounds or five quarts of milk replacer daily.

The point here is that as calves increase in size the dose of coccidiostat required for effective control goes up. For calves under three weeks of age nearly all of the coccidiostat has to come from medicated milk replacer. Very few three-week-old calves eat the required amount of medicated starter grain to get the amount of coccidiostat needed for control.

### **What else should I do for my calves under three weeks of age?**

Be sure the calves have plenty to eat. Skimping on milk or milk replacer during the first three weeks delays immune system development. Well-fed calves have a much greater ability to mount an immune response to coccidia than ones getting just enough for their maintenance needs. If you are in doubt about how well they are fed look at their body condition. They don't need to be roly-poly fat but they should feel solid in the loin and have a good layer of flesh over their ribs. If your calves are thin they need more groceries. Groceries are always cheaper than electrolytes and drugs.

Be sure the calves have plenty of fresh water daily starting at day one. Also remember to provide fresh palatable starter grain as early as practical.

Be sure to think about reducing stress. Stress may come from being excessively hot or cold. It may come from an excessively dirty environment. It may come from bacteria living on feeding equipment that's not being cleaned properly. It may come from too many pathogens floating around in the air calves breathe.

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