

CALVING EASE

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Solving Water Feeding Issues

Summary:

1. The best way to avoid calves gorging on water when first offered free choice is to provide access from day two.
2. Rather than depending on withholding water to get firmer manure from young calves, find out what is causing loose manure and fix the problem.

When I first feed water to my calves they drink the water and then won't drink their milk. This is very common observation. Some farms do not feed water to calves until they are several weeks old or even older. Then, when water is introduced there is a tendency for them to drink lots of water. This is accompanied by lack of interest in milk at the next feeding. This is interpreted as support for not feeding water to young calves. "See, I told you so. If I feed water to young calves they will not drink their milk."

Actually, if water is offered from day two it is not a novelty to the calf and gorging on water is rare. I admit it is extra work to provide fresh water at least daily for young calves. Then, it's a bit frustrating when most of them drink such a small volume – often as little as only a cupful daily.

I found that when young calves were provided body-temperature water free choice they often acted to rehydrate themselves before I realized they were scouring. This was in addition to oral electrolytes that I fed once scours were diagnosed. Another advantage of having water available all the time is that it encourages calves to start eating grain sooner.

When I feed water to my very young calves it increases the rate of treatable scours. This observation leads to this question: Why would water

cause scours? Let's review the normal pattern of liquid movement out of and into the gut.

The calf drinks milk. With good esophageal groove closure nearly all of it goes directly into the abomasum (the stomach compartment similar to that of a pig or human). During the time the milk is here and in the small intestine a lot of the liquid is absorbed or removed from the gut.

However, as the digested solids move along and through the large intestine liquid moves back into the gut. Think of the digestive process as accompanied by lots of fluid movement back and forth across the gut walls.

What happens when a calf drinks water? Remember, that when very young calves are offered free-choice water from day two they usually drink small amounts, often less than two cups a day. Water goes into the rumen. Some of it is absorbed there. The remainder goes through the reticulum, omasum and abomasum. Eventually some of this water, just like the milk, ends up in the small intestine. Here much of the water moves out of the gut.

So, back to the question. Why would water cause scours? The answer is that the water is very unlikely to be the cause. The more probable explanation is that the calves are going to have diarrhea anyway (from bacteria, virus or parasite). That is, they have a GI or gastro-intestinal infection.

All the water does is provide more fluid to move back into the gut in the large intestine to dilute the toxins from the infection. Thus, the calves are looser than they would be without water. Or, to put it another way, if you deliberately allow calves to get partially dehydrated they will be less loose when they have a GI infection.

The solution is not to withhold water. Rather, try to track down the sources of the infection. For example, check "as-fed" colostrum and milk for bacteria content. Review calving environment management as a way of cutting down pathogen exposure.

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