

Vet's Corner: Change in Oral Calf Scour Treatment

For years, our practice has recommended the feeding of appropriate volumes of electrolyte-enriched fluid to correct dehydration and acidosis in scouring calves. Over the years, several companies' electrolyte packages have been tried by our clients. Recently, one of our associates attended a seminar that featured Dr. Geof Smith of North Carolina State University and she received some great new ideas on how to improve oral electrolyte fluid therapy for baby calf scours.

In the past, our electrolyte packages contained bicarbonate and we did not realize the drawback to using bicarb as the alkalinizing agent. Feeding bicarb raises the pH of the abomasal contents. In a natural low pH environment, pathogenic E. coli and Salmonella bacteria will not survive or multiply. So even though numerous calves were helped in the past by oral electrolyte therapy, the bicarb was increasing the calf's exposure to common disease-causing organisms.

A different alkalinizing agent, Acetate, is in our new electrolyte product and it has the following advantages over bicarb:

Acetate will break down into VFA which can be absorbed in the calf's gut and assist sodium absorption.

Acetate will not raise abomasal pH and will inhibit Salmonella growth.

Acetate is an energy source to off feed calf.

Other calf scour packages that we carried in the past, contained thickening agents which gave the impression of a fast recovery from scours. The client would see a faster end of diarrhea and we thought that the fiber's effect of slowing gastric emptying would enhance nutrient absorption and improve glucose absorption. Research has shown just the opposite effect. Glucose absorption is decreased in a transient manner, which would further depress the scouring calf. Our new treatment choice doesn't contain a thickening agent, so we will not expect the fast cessation of scours. Instead, we will measure treatment success by the improvement in attitude and appetite of the calf.

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