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VETERINARY SERVICE

Calf Dehydration - The Value of Oral Fluid Therapy

Scours is a major concern when raising dairy or beef calves and can be difficult to treat. The most common causes of scours are: cryptosporidium (parasite), rotavirus (virus) and coronavirus (virus). Less commonly, E. coli and salmonella (bacteria) can cause scours in young calves. All of these organisms have one thing in common; they dehydrate calves.

How do you treat the dehydrated calf?
In order to effectively treat a dehydrated calf it is important to replace the lids and electrolytes the calf has lost. This can be done with oral fluids (electrolytes), subcutaneous fluids, and/or IV fluid therapy. Oral electrolyte solutions are the most commonly used and least invasive therapy.

Electrolytes should be given between regular feedings of milk or milk replacer. While commonly done, it is not recommended to withhold milk or milk replacer from the calf while treating with electrolytes. These calves still need the energy, fluids and nutrients provided by milk. Increased stress on the immune system and damaged intestines due to scours make the energy provided by milk all the more important.

There are hundreds of different electrolyte products on the market, and they are ***not*** all the same. Many products have little research associated with them and it is best to consult your veterinarian when selecting a proper electrolyte solution. The following components are essential to evaluate when selecting an electrolyte solution.

1. **Replace Lost Electrolytes**: At a minimum they need to replace lost electrolytes such as sodium that are lost through diarrhea.
2. **Facilitate Water Absorption:** Ingredients such as glycine or acetate aid in absorbing water from the gut into the bloodstream to facilitate rehydration.
3. **Include a Buffering Agent:** Buffering agents such as acetate and proprionate that prevents the animal from becoming acidotic, worsening their dehydration.

In addition to selecting a proper electrolyte solution is important to mix and feed the solution according to label instructions. Improperly mixed or fed solutions can cause calves to bloat, which may lead to death. Calves that are down and do not have a suckle response will likely not respond to oral fluid therapy and a veterinarian should be consulted for further treatment recommendations.

If you have any questions about this or other calf related topics feel free to contact us.