

Head office  
1805 Sawmill Road  
Conestogo, On, N0B 1N0:  
Tel: 519.664.2237  
Fax: 519.664.1636

Mount Forest  
Tel: 519.323.1880  
Fax: 519.323.3183

Tavistock  
Tel: 519.655.3777  
Fax: 519.655.3505



Toll Free 1.800.265.2203

Volume 13, Issue 2

Conestogo, Mount Forest, Tavistock

APRIL—MAY 2013

## Electrolyte Therapy for Calves

Electrolyte therapy has regularly been used in the dairy industry to help calves recover from dehydration due to scours. The veal calf is very prone to dehydration due to scours, transportation stress, heat stress or other stressors such as mixing with other calves and so, the veal producer is often faced with the challenge of dehydrated and scouring calves. During an episode of scours, the lining of the bowel is damaged and therefore a loss of fluids occurs. There is a loss of vital salts, fluid and energy that is necessary for calf survival. The treatment method is directed at replacing these losses. Adequate hydration therapy is the first step in treatment of scours and the first line of defense. Electrolyte products are combinations of minerals, carbohydrates and amino acids that assist in rehydrating the calf, replacing lost minerals and providing energy and protein to the calf. This therapy corrects dehydration, restores the normal acid-base balance and replaces salts in the calf's bodily fluids. The primary objectives of administering an oral electrolyte solution are to maximize water absorption from the digestive tract and to facilitate the rapid re-establishment of the water balance between the plasma and cells within the animal's body. Sodium is a major component to any good electrolyte product. The amount of electrolyte solution required by a calf each day depends on how dehydrated the calf is and what ongoing losses are occurring. Administered early and frequently, these fluids help the calf maintain vigor and allow it to continue suckling and also to maintain normal body temperature. Many producers feed electrolyte solutions to diarrhoeic calves between milk feedings or at the time of milk feeding. In the past, electrolyte solutions were not mixed with milk because of concerns about changes in intestinal morphology and bacterial flora leading to fermentation of undigested and unabsorbed nutrient, inhibition of clot formation in the abomasums, and decreased abomasal emptying rate because of the increased osmolality of the electrolyte. These concerns led to recommendations that milk should be withdrawn from feeding for the first 2 days of treatment. However, feeding the low-energy electrolyte solutions exclusively causes gross energy deficits; it is advisable to continue feeding milk to prevent body weight losses. This is especially important in the winter months when the baby calf needs the extra calories to sustain its body temperature as well as growth.

It is important to also be aware of the consistency of the calves' feces. It is an indicator as to whether the calves have been dehydrated or have caught a bug. If there are no feces present it could be so watery that it has absorbed into the bedding much like urine. In the early stages of diarrhea, calves are usually standing upright and therefore the products given orally can be effective. As the disease progresses and dehydration worsens, calves become weaker and depressed; thus decreasing their voluntary intake of fluids, even milk. They can become emaciated and have little or no suckle reflex, therefore intravenous (IV) fluids may also be necessary. Administering fluids too late or giving too little allows the progressive fluid loss to continue and the calf's condition to deteriorate. (Carolyn Innes)

**WE WILL BE CLOSED  
ON MAY 20TH FOR  
VICTORIA DAY.**

**PLEASE ORDER YOUR  
FEED ACCORINGLY.**

### **FUTURES MARKET**

#### **BEEF**

APRIL	126.20
JUNE	121.17
AUGUST	122.85

#### **PORK (US \$ PER CWT.)**

APRIL	79.68
JUNE	89.33
AUGUST	89.90

### **HOURS OF OPERATION AT THE CUSTOMER SERVICE DESK**

Monday –Friday: 8:00 a.m.—5:00 p.m.

Ways to place your order:

Toll-free: 1.800.265.2203

Fax: 519.655.3505

Email: [orders@wsfeeds.ca](mailto:orders@wsfeeds.ca)

Online: [www.wsfeeds.ca](http://www.wsfeeds.ca)

## What to improve in Young Stock Rearing?

There is much to gain by good young stock rearing. On an average farm with 70 cows and 600,000 liters annual production you can easily gain \$5000 per year. What do you need to do? Here are several simple tips:

### Colostrum before bacteria

Ensure the newborn calf gets colostrum before bacteria establish. This means calving in clean straw and ensuring the calf gets two liters of colostrums as soon as possible after calving and another subsequent two liters six hours later. The first milk produced within hours after calving contains large amounts of immunoglobulins (antibodies). As immunoglobulins (Ig) cannot pass through the placenta to the unborn calf, the only source of immunity is passive transfer from the colostrums in the short period following calving. Good quality colostrums is the best insurance against diarrhea and pneumonia, the two biggest calf killers. However, many farmers fail to maximize the use of this yellow coloured liquid gold. There are many practical solutions to optimize passive transfer of Ig and kick-starting the calf's own immune system:

- Use buckets with a lid to prevent dirt or faecal material contaminating the colostrums
- Ensure there is easy access to a fridge, as well as two-liter bottles or bags in which to store the colostrum
- Try to feed the calf colostrum from its own mother where possible. Mark the collection bottles with the individual calf and cow numbers
- Heat up the colostrum to body temperature (38 degrees Celsius)

It is vital to measure the quality of the colostrum with a colostrometer. Other options are four liters of frozen or pasteurized colostrum, then directly onto milk replacer.

### Minimize stress by adapting calves to group housing and ensuring a good environment

It is common to see that many calves fail to grow around weaning –know as the weaning dip. What is the reason for this dip? Weaning stress, cold stress and drafts, as well as a delay in feeding concentrates and hay. Much of the stress of weaning can be reduced if changes are made in small steps. It is advisable to start offering water, hay (forage) and concentrates during the first week of life to promote early rumen development. Once the calves have been taken off milk/milk replacer for a week, put calves in pairs. Wait a few days, then group two pairs together to make a group of four calves. After a week, move these groups of four to a different barn, where they stay together for a week to get used to the new barn. This gradual introduction gives the calves time to adjust to their new "herd" and environment.

A warm, dry nest is crucial when it's cold. For the first two months deep, loose straw is recommended. Ideally enough so that the calves legs cannot be seen when they lie down. A deep straw resting area is recommended for animals up to six months old. Until this age, the internal "heater" (the rumen) is not effective. It is not producing enough energy to keep the calf warm. Too many calves suffer from cold stress unnecessarily. Deep straw feels seven degrees warmer than a rubber mat. Calves learn to lay down in the beds more easily if chopped straw is placed on the mattresses for the first few days (Jeop Driessen, Cow Signals Training Company)

## Specials for April

### **SHEEP**

Buy 5 bags of any Lamb Starter and receive 1 free Sheep Block

### **DAIRY**

Buy 5 bags of Transition Cow Supplement and receive 1 free 500g package of Fresh Cow Alpha

**These specials will run until April 30, 2013.**

### **FRESH COW ALPHA**

When cows freshen, they lose a large reservoir of the essential nutrients needed to recover and transition into lactation quickly. Make recovery easier by giving Fresh Cow Alpha Supplement to boost levels of yeast, magnesium calcium, potassium, and niacin. Fresh Cow Alpha Supplement helps to reduce immediate post-calving complications. It also helps to provide nutrients needed to reach optimum peak milk therefore improving profitability.

### **WHEN TO USE:**

- For cows that are energy deficient
- For cows that are off feed
- For post-surgery
- As a follow up to intravenous calcium administration to maintain calcium levels
- To help the cow to reach optimum peak milk

Contact your sales representative for more information.