

# Livestock Nutrition Fundamentals That Can Have Big Returns



By Dan Leiterman

In any life endeavor it is critically important to get the fundamentals done right, or else the whole project is at risk, no matter how much added effort and resources are applied. This is true in any business and is definitely the case in an agricultural business.

When it comes to livestock nutrition, meeting the basic nutritional needs of the animal at the right time of need is fundamental to the success of a livestock enterprise. This is true no matter what the species. In this article I will use dairy cows and calves as my example of concepts that would apply to all livestock.

The examples I will site here are fundamental nutritional practices that have a tremendous return-on-investment (ROI) to the producer, not only in the short and mid-term, but even more importantly in the long-term. Listed below are some key fundamentals to focus on for improving dairy profitability.

## ***Calf Milk Mate™ for Newborn and Young Calves***

Whole milk is a wonderful feedstuff for calves, however, there are at least eleven key nutrients that are deficient and/or devoid in whole milk that the calf needs. Research has shown that how the calf is fed in the first eight weeks of age does set the stage for how it will perform as a cow in the dairy herd for the rest of her life. This is a critical time to get the basics done right. Feeding Calf Milk Mate™ with the whole milk provides these needed nutrients. For example, Calf Milk Mate™ provides oral selenium to help prevent selenium deficiency. A deficiency of selenium will manifest itself initially as a calf that is not an aggressive drinker on the bottle, a poor doer, lethargic and eventually having white muscle disease/heart damage. Other key nutrients provided by Calf Milk Mate™ are, vitamins A, D<sub>3</sub>, E, C and trace minerals cobalt, copper, iodine, iron, manganese and zinc.

Calf Milk Mate™ is very economical to feed and only requires two grams per calf twice a day mixed into the whole milk.

## ***Calf Shield® for Young Calves to Eight Weeks of Age***

Calf Shield® is a well-designed formula that can help stabilize the calf's digestive function. Calf Shield® provides a baseline of stability in the digestive tract that is broad based, so that the calf can optimize the nutrition it is getting. Keep in mind, it does not matter how good the nutrition program is for the calf, if the calf cannot use the nutrition properly because of a digestive upset. When this occurs, the fundamentals of nutrition delivery have failed and the efforts of raising a healthy calf and a solid cow for the herd are at risk. Many customers that use Calf Shield® see improved calf performance. They have found that problem issues fade away and they see the benefits of feeding Calf Shield® to their calves for the first eight weeks of age.

A typical feeding level can vary from 7 to 15 grams/head/day depending on the challenge level to the calf. Several calf operations that feed Calf Shield® find that other additives are no longer needed, bringing about a significant cost savings. On its own merit, calf performance and ROI, feeding Calf Shield® outweighs its cost. Calf Shield® comes in organic and non-organic formulas. Calf Shield® reduces calf operation risk, improves ROI and is a significant strategy to support the fundamentals of feeding a healthy calf.

## ***A Crystal Creek® Dry Cow Nutrition Program Is a Smart Fundamental Strategy***

A proper dry cow nutrition program is the fundamental cornerstone to a successful lactation. The dry period is a time to prepare both the cow and the fetus for optimum performance postpartum. Feeding the

dry cow the correct forage to meet her nutritional requirements is paramount. I see many dry cow programs in the industry feeding the wrong forage to the dry cow and then trying to patch it up with expensive, 'high-tech' additives and other feedstuffs. Two examples of these additives are anionic salts and calcium/cation binders. Both of these flawed strategies are only necessary when the dry cow feedstuffs include inappropriate forages like alfalfa haylage that contains high levels of cation. It is much more biologically beneficial and economically efficient to feed the correct forage to the dry cow to begin with and not have to do nutritional contortions to fix a seriously flawed strategy.

A much more economical and successful approach to dry cow nutrition is to have feedstuffs that are put up to meet the unique needs of the dry cow so you do not need to purchase anionic salts or cation binders for the diet. The concept of growing forage specific to a dry cow seems counter intuitive to some people because it does not meet the high protein and perceived standards of high-octane alfalfa. If you do not want to, or cannot grow proper dry cow forage, it will then be necessary to purchase a dry cow hay. A good dry cow hay is one that is low in calcium and more importantly, potassium. Grass hay is going to be the best style of hay. Some target nutrient analysis values for grass hay that fit well into a dry cow diet would be: an NDF of 60% or more, a potassium level of 1.5% or less, a calcium value of less than 0.8%. A leafy hay with some good sugar levels of 6% or more would also do well to support rumen function and help the cow prepare for the lactation ration.

Contact a Crystal Creek® nutritionist to design a dry cow nutrition program specific to your herd.

## ***Use Super Boost™ and Fresh-N-Easy™ for Fresh Cows***

Properly addressing metabolic requirements immediately after freshening will support a cow's ability to express milk production and reproduction to her best ability. The cow's



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calcium requirements are high after freshening and the industry has done a decent job of highlighting the need for oral calcium shortly after freshening. Research shows that proper oral calcium significantly reduces the risk of milk fever as well as ketosis and helps increase milk production during the entire lactation.

Calcium is only part of the cow's nutritional requirement, however. The cow's liver also needs significant support. A sound fundamental fresh cow strategy would be beneficial to the producers bottom-line. Here are some basics I would recommend:

At Freshening:

- a) Administer 4 Fresh-N-Easy™ boluses at freshening and repeat in 12 hours
- b) Administer 2 Super Boost™ boluses at freshening for liver support.

Crystal Creek® has additional products and strategies to help with a smooth transition into lactation. Examples such as Crystal Pellets™ for supporting the cow during the stressful pre- and postpartum period of dairy cows, or Fresh-N-Drink™ a high calcium supplement that provides key vitamins, trace minerals and digestive aids needed by fresh cows.

With today's increased cost of production, it is important to make decisions that provide a positive impact on the nutrition of your livestock. The products and programs chosen should have a payback resulting in healthy, productive animals and a better bottom-line. Getting the fundamentals right will help you build a solid future for your farm and your livestock. Call Crystal Creek® to discuss questions you may have regarding calf, dry cow or transition cow nutrition.