Mid-West Cattlemen News

Managing your newly weaned calf

By: Wesley Moore, Beef Technical Specialist, 573-680-8212

Providing a healthy and productive transition for the newly weaned calf should be the number one priority for a cow-calf operation. Stop and think about the amount of resources (cost) that have gone into raising a weaned calf. The cow has been fed nine months during gestation and good nutrition has been supplied to that cow and calf for six to eight months up to weaning. As cow-calf producers, we can't afford to lose calves at any stage of production, but especially when they are this close to generating cash income for our operation.

Pre-Weaning

There are several pre-weaning management practices that can reduce stress during the weaning process. These pre-weaning practices are common for what would be considered "branding" time where the calf is castrated, identified and vaccinated while still on the cow. By administering the first round of vaccines while the calf is still on the cow, you remove environmental and dietary stress and obtain a better response to the vaccines when compared to performing these processes post-weaning.

From a nutrition standpoint, creep feeding or bunk-feeding can be good practices pre-weaning that reduce stress during the weaning process. By creep feeding the calf or bunk-feeding the pairs we can familiarize the calves with feed and teach them to approach a bunk during feeding time. Several research projects have demonstrated that creep-fed calves will start on feed faster than non-creep fed calves. Feeding pre-weaning also provides the opportunity to improve trace mineral nutrition in the calf.

Weaning

Put yourself in the shoes of a newly weaned calf. You are seven months old and mom is no where to be found! In most weaning scenarios, you have been moved to a strange place, processed and are expected to consume your nutrients from a grain based diet in the bunk instead of mom's udder. Talk about a stressful time! As producers, there are several management strategies that can help transition this calf while reducing stress.

In terms of the weaning process, you have several options to consider. Dry-lot weaning, pasture weaning, fence-line weaning, nostril covers, or sale barn weaning would all be available options. Each system has its pros and cons, but in general what is needed is the infrastructure to separate the calf from the dam while having available labor to monitor health of the weaned calf.

Regardless of the weaning facility, some simple modifications can improve your weaning system. Research indicates that allowing fence-line exposure to the dam during weaning reduces stress hormones in calves. Also, consider using the calves' behavior to your advantage by positioning feed bunks and water in optimal locations to encourage eating and drinking. This can be as simple as positioning the bunk and water source on the same fence line of the cows since the calves congregate there. Also consider positioning the bunk perpendicular to the fence line so the calves trip over it while they are pacing the fence. Use of open-trough waterers would be recommended over ball or hole waterers because they are more accessible by the calf. Also, it is important to have no more than 20 calves per waterer space. For example, if you had 100 calves in a pen, 5 calves would need to be able to access the waterer at the same time. These simple strategies can make best use of any facility type while encouraging water and nutrient intake.

Nutrition of Stressed Cattle

My opinion as a nutritionist might be biased, but nutrition and immunization are the most important components of a successful starting program. Encouraging adequate nutrient intake should be first priority in high-stressed cattle. Nutrient intake will influence the ability of the animal to build an immune response to pathogens. Often times nutrient requirements for growth and immunity are greater than forage can provide so a good starter feed is a must. The No. 1 goal of the first 14 days is to maximize intake. Often times

stressed cattle will consume less than half the dry matter they are capable of consuming so consider a feed that is nutrient dense and highly palatable.

To encourage intake, it is often a good idea to have a courser particle feed like a pellet or textured feed. Molasses can also help reduce dust and encourage intake. It is discouraged to feed ensiled feeds or forages during this transition period because they will reduce feed intake. Look for a feed that is energy dense but will not cause digestive upset. This can be accomplished by providing a feed that uses a blend of digestible fiber, starch and fat for energy. As a rule of thumb, never feed more than 0.5 percent of BW of a starch based supplement to starting cattle. Rumen degradable protein is important to encourage intake and healthy rumen function. Vitamins and trace minerals are also important during this transition and play a critical role in the immune system. Make sure you are providing feed fortified with copper, zinc, selenium, iodine and vitamin E at levels to meet requirements. Cargill has several starter feed options!

Additives

Feed additives are used heavily with weaned calves. The most important thing to remember when using additives with newly weaned or highly stressed cattle is they don't ever eat as much as they should. Make sure dosage is figured on actual intake not projected intake for a normal calf. Yeast products or probiotics are definitely good options in a starter feed. In most situations you will see improved intake and performance with probiotics and better immune response. Just make sure the product you choose is well researched and will provide benefit.

Coccidiosis is another challenge that is often addressed in a starter feed. Amprolium or decoquinate are great options for controlling coccidiosis. If coccidiosis has not been a problem on your operation historically, then an ionophore would provide good insurance in a starter feed. Some ionophores can reduce intake of starter supplements so make sure they are used per label instructions. My ionophore preference would be lasalocid because it does not impact feed intake and is approved for use with chlortetracycline (CTC). CTC would be the last of the popular feed additives and it does have a label claim for prevention of pneumonia. Just remember if you feed CTC to work with you veterinarian to develop your program as it now requires a VFD to use!

Economics of Preconditioning

The definition of a preconditioned calf is typically considered a calf that has been weaned for 45 days, has had two rounds of viral and clostridial vaccines, and has been castrated and healed (VAC 45). At the sale barn level, preconditioned calves can have as little as one round of vaccinations prior to weaning. Calculating the economic return to your operation for preconditioning calves can be difficult because the premium is a moving target (summarized in table above). For this instance we will consider a VAC 45 preconditioned calf with a premium of $5/CWT. The one parameter that is often overlooked in preconditioning programs is the same time your calf is developing immunity and learning to live without mom, it can also be gaining weight! I have provided an economic analysis in the table below based on current calf prices in Missouri.

Published Value Increases from Preconditioned Calves

Publisher	Preconditioning Calf Range	Years
Iowa State	$1.71—$7.44/CWT	2008-2014
Oklahoma State	$1.80 —$7.60/CWT	2010-2013
Kansas State	$1.93—$10.58/CWT	2011

Economics of Preconditioning

	Weight	$/CWT	$/ head	
Non-Preconditioned	500	$168.60	$843.00	
Preconditioned	570	$166.30	$947.91	
Additional Expense to Precondition Calf				
Processing Labor	Feed	Vaccine	Dewormer	Total
$7.00	$46.00	$8.46	$2.59	$64.05
Return for Preconditioning ($/head): $40.86				

Consider preconditioning to add value to your operation!

Contact your Cargill representative for starter feed options.