

How to manage the cow and calf at calving?

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Over time, I have become more appreciative of the influence of those great teachers from whom we have learned professional skills and correct principles. One such person for me was Dr. Wesley Crenshaw, an anatomy professor at the University of Missouri Veterinary School.

Crenshaw was my pre-vet student advisor as well as the instructor of histology (microscopic anatomy) for first-year vet students. As we peered through the microscope at seemingly countless tissue slides, the good doctor would constantly remind us, "You have to know the normal to be able to recognize the abnormal." With that principle in mind, let's consider the "normal" calving phenomenon as it occurred prior to domestication or as close as we can come to that happy state in today's modern world.

I have always been fascinated to observe how domestic animals act when left alone, without much human intervention. Our weekly drive to church on Sunday mornings takes us by a hillside pasture where a cattleman calves out his Angus cows in the spring. The lay of the land gives an unobstructed view of the entire pasture. Since the cow's natural inclination is to seek out a private secluded place in which to deliver her calf, we observe that each cow-calf pair will evenly distance themselves from the others and will maintain this isolation for several days. After a few weeks, it's common to see calves gathered together in small groups of five or six and guarded by a lone sentinel cow. I often wonder how this "babysitter" cow is chosen or if each mother cow takes her turn on a rotational basis. As more calves are born, other groups are eventually formed, and these groups gradually intermingle until the calves become fully integrated into the herd.

There are two main advantages of this naturally occurring limited isolation. In conjunction with the protective effects of colostrum it gives the calf's immature immune system time to develop by having a successful response to

its first mild exposure. It also minimizes exposure of the whole group in case one calf becomes sick. Whether you are raising beef calves or dairy calves, adequate colostrum as an immune support coupled with limited isolation for the newborn are the pillars of nature's plan to ensure healthy calves.

Our modern methods of raising dairy calves have come a long way from a natural environment. It is a tribute to the calf's versatility that she is able to adapt as well as she does to these changes. The essence of holistic calf management is to combine the best of our modern technology with natural principles to develop a program that encourages the calf to reach its highest level of health and productivity. To the extent that we can mimic nature, we will be more successful and have fewer problems.

The one thing absolutely necessary to delivering and raising a healthy calf is to have a healthy mother cow. By that, I do not mean just a cow that is showing no obvious symptoms of disease. There are different levels of health, just as there are different levels of disease. Just because she is free of symptoms, does not mean she is at a high level of health. If a cow is in a high state of vitality and allowed to exhibit a high level of life force, her calf will always get off to a better start and be much easier to raise than a calf from a dam that has subclinical disease problems or is suffering from a great deal of stress. Colostrum from a healthy, high vitality dam will be of higher quality, and her calf will be more vigorous. We must manage the dry cow for enhanced health - a healthy calf depends on a healthy cow.

Calving is a critical time for both the cow and the calf. For the two or three weeks immediately prior to freshening and for about the same period afterwards, a dairy cow is in a state of increased stress and lower immune function. Problems during this critical time can have adverse effects on health and production that may last throughout the entire lactation. By the same token, anything that you do here to bolster the health and vitality of the cow and calf will certainly benefit the cow during her lactation and may benefit the calf during its whole life.

We tend to focus on the immediate health and productivity of the cow and her current offspring. We should not overlook the fact that the egg that will produce a calf next year begins its maturation process during this period of immune system suppression. The future health of this calf is greatly affected, for better or for worse, by anything that affects the cow at this

critical time. Nutritional balance and mineral balance are extremely important. Providing free-choice individual minerals and trace minerals will help provide this balance.

Allow the cow to calve in a well-bedded, comfortable, private, superclean maternity pen. Immediately after calving, provide her with 10 gallons of warm water with some added electrolytes or salt. This helps her to expel the placenta. Adding fill to the rumen helps to avoid displaced abomasums. Remove the placenta as soon as it is expelled. Do not let the cow eat the placenta. This may have been a natural act in the wild to clean up the calving area to avoid predators, but in the modern dairy, a cow eating the placenta may cause digestive problems, lowered peak production and even death if the undigested membranes lead to a fatal impaction.

Let the cow lick and clean off the calf. Do not let the calf nurse. This interrupts the transfer of disease organisms and parasites to the newborn. Milk-out the colostrum, and get the calf to take at least a gallon in the first six hours of life. As soon as the calf is dry, remove it to a properly constructed and installed hutch (limited isolation). In a Utah study a few years ago, first-calf heifers raised in a hutch outperformed their group-raised half sisters in the same herd by 2,000 pounds of extra milk.

Saturate the navel with iodine as soon as possible after birth.

Administer a natural immune stimulant such as colostrum-whey immune products.

The gut is the first line of defense against many infections. It has been estimated that 60 percent or more of the immune protective response takes place in the gut. It is important to provide a source of beneficial microorganisms for the first couple of weeks, especially if the dry cow's udder was infused with antibiotics. Antibiotic residues in the milk tend to depress beneficial organisms in the gut.

If possible feed your best-quality whole milk to your heifer calves.

Everything you do, or don't do, for a calf in the first few hours after birth will have an effect. Do it right and improve herd health now and for future generations.