## Early Weaning: Part 3 of 3

## Calf Health at Half the Age

Keeping young calves healthy can be easier than you think.

by Laura Nelson

hen weaning season is put on fastforward, maintaining calf health is all about pushing "play" at the right time. Pulling calves from the cow at half the conventional age changes the timeline of health protocols, but that's not a bad thing.

"You would think these younger calves would require more attention, but my experience is that the health on them is outstanding," says Ruminant Nutritionist Jeff Heldt. "The number we doctor and the amount we have to monitor on a day-to-day basis is much less than your typical 600-pound (lb.) calf weaned in October."

The field consultant with Land O'Lakes Purina Feed says the cattlemen he works with in western parts of Nebraska and South Dakota have weaned approximately 2,700 calves at a 90-day target. At first, he encouraged them to wean early to conserve forage in drought years, but Heldt says he continues to do so because it reduces cow costs, increases grass availability and shows tremendous benefit to calf health and performance.

Offhand, producers may not see the logic because they often worry about the health of their smallest calves.

## **Immune system considerations**

"Calves at that age are not going to be as immuno-competent as older calves. That's a function of the maturity of the immune system, and it's highly dependent on age," says Mitch Blanding, senior veterinarian for Pfizer Animal Health beef operations. The calf will have a fully functioning immune system of its own at that age, but it will not be as efficient in responding to antigens, resulting in a slower and weaker immune response than what would be seen in older calves.

"We used to think vaccinating calves at this time was of very little value because it would be blocked by maternal antibodies. We now know that's not entirely the case,"



Blanding says. "Recent research has shown that vaccination during this early timeframe will result in a 'priming' of the immune system and will allow the calf to have a more robust immune response when vaccinated at a later date."

Heldt says it comes down to timing: "The cow's contribution to the health of these little calves is pretty crucial. Her antibodies and nutrients are still in his system at weaning time and helping him out, as opposed to a 600-pound calf that might have had his last shot at branding three months before and is now on his own. That calf is a lot more likely to struggle under the stress of weaning than the young one."

## **Vaccination considerations**

Early vaccinations can help the immune

system to positively respond after the maternal antibodies have disappeared. Certain modified-live virus (MLV) vaccines have been shown to provide a protective response at a very young age, but Blanding says that may not be enough.

"Because of immune system immaturity, one vaccination at that age may be less than optimal compared to the response you might get three months later," he says. "So we need to keep in mind that those young calves, especially,

will likely need to be revaccinated at a later date to ensure adequate protection."

First, read the labels. "There are only a few vaccines on the market right now that will allow use at such a young age, so read carefully and consult with your own veterinarian," Blanding cautions.

The booster should be administered two weeks prior to weaning, and get dehorning and castration out of the way by then, too. That'll cut down on weaning-time stress, giving calves a healthy edge, Heldt says.

Jeff Heldt encourages early weaning because it reduces cow costs, increases grass availability and benefits calf health and performance.

It's also important to keep in mind the benefits of deworming these young calves, Blanding adds. Calves at this age are very susceptible to the effect of parasitism, and removal of these parasites will help enhance their response to vaccines.

Weather also benefits a spring-born calf weaned in mid-summer.

"It's going to be hot, so it might be worth the effort of having a mud hole in

the pasture or shade provided in the pen when you're weaning," Heldt says. "But there aren't the dramatic temperature fluctuations you would normally see in the fall, which is hugely beneficial to the calves' health."

Those bonuses continue into the feeding phase, too. Tom Williams, owner-manager of Certified Angus Beef LLC (CAB)licensed Chappell (Neb.) Feedlot, deals with early-weaned calves in the feedlot and in his own herd.

"The health on those younger calves is generally very good when we get them," he says.

Early weaned often means they're ready for an earlier market, another payoff from good health.

"We don't have the challenges

from the October mass of bawling calves coming into the feedyards. They're typically not exposed to as much commingling, which gives us a chance to get them off to a good start," Williams says.

That leads to a good finish. Calves with an early start can fit into the peak seasonalprice window that begins to close when the bulk of conventional cattle are ready.



► "Recent research has shown that vaccination during this early timeframe will result in a 'priming' of the immune system and will allow the calf to have a more robust immune response when vaccinated at a later date," says Mitch Blanding, Pfizer Animal Health.

Аj