

# Managing Early-Weaned Calves

## Tips to get early-weaned calves off to a good start.

by Taylor Edwards, intern

**W**ith current drought conditions, now is the time to consider early weaning as a tool to reduce forage demand on pasture, improve cow body condition score and improve cow breed-up.

The University of Nebraska–Lincoln (UNL) released a webinar through the Center for Agricultural Profitability in which Randy Saner, beef extension educator, discusses how vital properly managing the nutrition of early-weaned calves is to encourage growth and independence during one of the most stressful times in their lives.

Keeping things as close to normal as possible during the transition away from Mom is key to successful weaning and setting the calf up for adulthood, he explains.

Weaning typically takes place when calves are 180-220 days of age. In certain cases, weaning early — when calves are 45-150 days of age — may be appropriate, says Saner.

### Early nutrition decisions

The key to planning successful early weaning for a calf is to start before it is born, says Karla Wilke, UNL cow-calf systems and stocker management specialist. Supporting the mother's nutrition while she is pregnant

ensures the production of quality colostrum for the calf once it is born.

After getting colostrum, the calf will still need milk to supplement what it is not getting from forages or other feed sources, says Saner.

The forage requirements of a nursing calf depend upon age. Saner recommends 2.4 pounds (lb.) of organic matter per day for a 3-month-old calf, 4 lb. for a 4-month-old calf and about 5.6 lb. for a 5-month-old calf.

“As they get older, they’re taking in more forage,” says Saner. “That’s why, if you wean early, you can save forages for your cows.”

The calf should have access to grass or feed in a bunk almost immediately, while on the cow, to begin developing its rumen, says Saner. Developing the rumen so a calf is properly prepared to have a diet focused on forages is key to keeping the calf on track and preparing it for weaning.

“A lot of people have the misconception that the calf is pretty much just on milk and then you wean, and the calf has to learn to eat forages,” says Wilke.

She recommends starting calves on feed and water while they are on the cow to increase familiarity with other

food sources. Then there will be no period of shock when offered these away from Mom.

Any time a calf is not eating, you are starting from behind, Saner adds. Getting those nutrients from an early age will help them through these stressful events while simultaneously developing the rumen.

“What you hope is that you’ve provided enough access to grass that they can graze, or feed they can eat out of a bunk, so that the rumen is fully developed,” says Wilke. “Then, they’re more familiar with it when they go to the bunk alone.”

Saner says rumen development is an important factor to keep in mind when curating a diet for early-weaned calves.

“A really young calf, at 21 days, is more of a monogastric, because that abomasum is really 60% [of the total stomach],” says Saner.

As the calf continues to grow, explains

*As they get older, they’re taking in more forage. That’s why, if you wean early, you can save forages for your cows.”*

**Randy Saner**

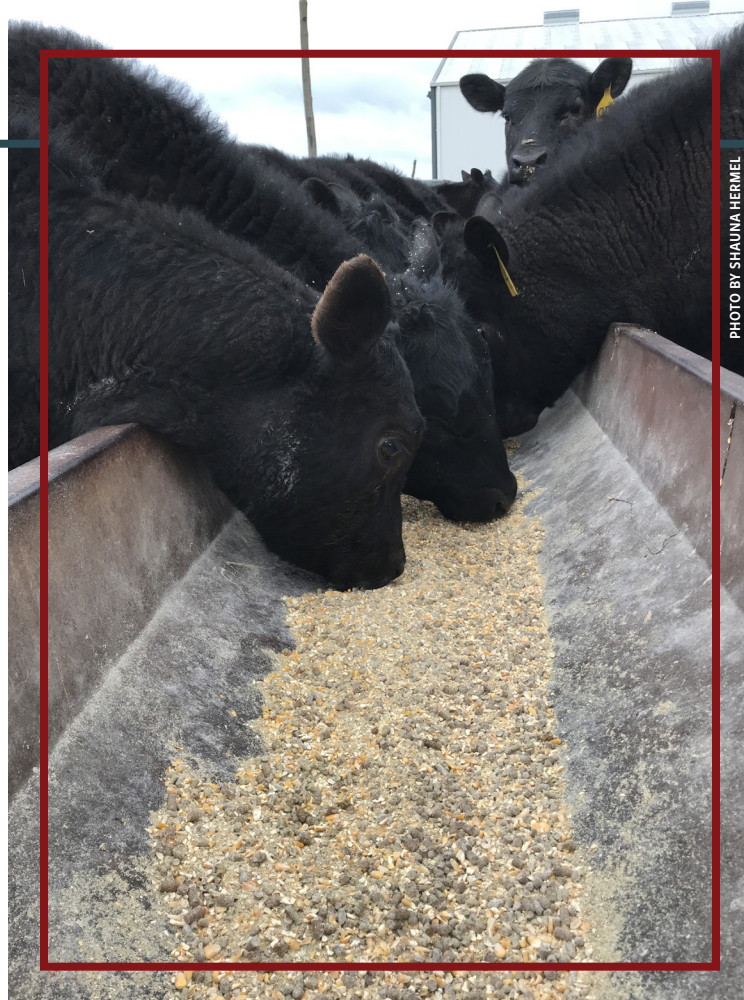


PHOTO BY SHAUNA HERNEL

Saner, the rumen increases its function. At around 56-84 days, the rumen has grown to about 60% of the stomach. Calves still have a large abomasum that accounts for about 30% of the total stomach, so using feeds they can digest easily is vital.

“[At] more than 84 days of age, you start seeing that rumen developing, and the calf becomes more of a ruminant at that time — but again, high-quality feed is still really important,” says Saner.

## Nutrition at weaning

With the removal of milk from the diet, Saner says young calves need another source of high-quality nutrition to maintain the same amount of daily gain, promote muscle gain and fortify bone structure. To accommodate the small rumen, providing a nutrient-dense, highly digestible diet that will pass through its system quickly will allow the calf to absorb the necessary nutrients through small, frequent meals.

“Energy and protein are huge components of that calf taking off and growing,” says Wilke.

Calves will receive these nutrients through free-choice access to a palatable

feed to encourage eating more quickly, Saner says, along with a well-maintained pasture or stored forage.

Milk bypasses the rumen and goes straight to the abomasum via closure of the esophageal groove, making it a very digestible source of protein and energy, says Wilke.

Supplementing a protein source that is not easily digested can help support gain without the calf’s depositing fat. Saner says an example of this type of protein supplement is distillers’ grain.

In addition to a good protein source, Wilke says calves need the minerals zinc (Zn) and copper (Cu) to boost immunity. A solid vitamin and trace-mineral package, offered free-choice or in a total mixed ration (TMR), can provide necessary levels.

Water is another important part of calf diets, because it influences how much they eat, how efficient they are with the feed and what their performance looks like, says Saner. Water requirements change as animals grow, but a 400-lb. calf needs 4-9.5 gallons (gal.) per day, depending upon the season.

## The final decision

There are many things to consider when weighing the advantages and disadvantages of weaning calves early.

“Oftentimes, we can get along very well early-weaning calves from a health standpoint because they still have quite a bit of passive immunity from the cow that they received through the colostrum,” says Aaron Berger, beef extension educator for UNL.

In the Center for Agricultural Profitability webinar, “The Option of Early Weaning Calves,” UNL beef experts identify key advantages of early-weaning calves:

- ▶ Dams of early-weaned calves should be in better condition at calving and cycle earlier during the next breeding season.
- ▶ Calves grow to their genetic potential because they have more time on a nutritious diet.
- ▶ Early weaning may be the key to more efficient feed utilization during times of drought or other periods of feed shortage.
- ▶ When calves are weaned early, more cows can be supported on a limited forage supply (an increase of

*Continued on page 30*

## Choosing a weaning method

Often paired with vaccinations, new feeding strategies, transportation and commingling, weaning can be stressful, which can impair calf health. Finding ways to ease the transition away from the cow is crucial to postweaning health and performance. What’s the best method for your operation?

“What’s your situation look like, and what do you need to do to make it less stressful for the calf given the facilities you have to work with?” Karla Wilke advises producers to ask themselves. The University of Nebraska–Lincoln cow-calf systems and stocker management specialist describes three options:

- ▶ **ABRUPT SEPARATION**, which is often thought of as the traditional weaning method, is total separation of cow and calf so they cannot come in close contact. Some producers choose to separate with enough distance pairs cannot hear or see one another. This causes high amounts of stress on both cows and calves, but it gives producers the option to sell calves almost immediately while eliminating the need to purchase feed and forages for calves.
- ▶ **FENCELINE WEANING** is separating cows and calves by placing them on opposite sides of a fence, but allowing them to have nose-to-nose contact for a period. This allows calves to

stay in a familiar environment while adjusting to life on their own. Calves weaned this way exhibit less stress, with less fence walking and fewer vocalizations. Fencing must be in good condition so cows and calves cannot cross. Producers will need a feeding and grazing plan to sustain both groups.

- ▶ **TWO-STAGE WEANING** is a process that involves first placing a device (such as a nose flap) on the calf and allowing it to stay with the cow, so the calf can graze and drink water, but not nurse. Stage 2 happens 10-14 days after, and the device is removed while calf and cow are separated. The two-stage method is less stressful than abrupt separation, but the labor is more intensive, calves are run through a chute twice and there are additional costs to the nose flaps.

Any weaning process that is gradual and less stressful can potentially improve herd health and performance, says Wilke, but the most important thing is picking a method that your operation can successfully execute with your current facilities. This will make the process easier on the animals and their caretakers.

For more information about weaning calves, visit <https://bit.ly/calfwean>.

approximately ½ acre of grazing per cow).

- ▶ Weaning calves before or early in the breeding season, increases pregnancy rates for thin cows.
- ▶ A high percentage of early-weaned calves have been shown to receive a USDA Quality Grade of average Choice or better.
- ▶ When there are limited grazing resources, early weaning fits fall-calving herds.

These benefits coupled with passive immunity are all positives, but there are a few disadvantages to consider when

deciding whether early weaning suits your situation. Saner recommends considering these disadvantages:

- ▶ Must maintain excellent calf nutrition and management.
- ▶ More labor is necessary.
- ▶ The facilities and feed must be available for small calves.
- ▶ Calves spend a lot of time in a drylot prior to slaughter (However, you can, once you get them growing, put them back on a high-quality forage).
- ▶ If you have developed a cow herd that has above-average milk output, you miss the potential increase in weaning

weights through milk production.

- ▶ Information on dam performance from production records will be of limited use, because calves are not on them for 180 days.

UNL has many extension specialists who spend much of their time studying growing calf nutrition and management strategies for producers to incorporate into their operations to ensure they are best utilizing their resources. Through webinars and other resources, they package this knowledge for cattlemen to use when making management decisions.

Matt Stockton, ag economics extension specialist, says, “It’s important to sit down and really put pencil to paper and think about, ‘What’s the cost of doing this?’ So if I’m going to take my calves and wean them early, ‘What’s the cost, and what’s the benefit I get from this?’” *ABB*

---

Editor’s note: Taylor Edwards, an ag communications major at Auburn University, is the 2023 *Angus Beef Bulletin* summer intern.

## Digital EXTRAS



Listen to this UNL webinar on how to plan, prepare to early-wean calves.



Read the UNL article explaining when early weaning makes cents.



Access the drought monitor.