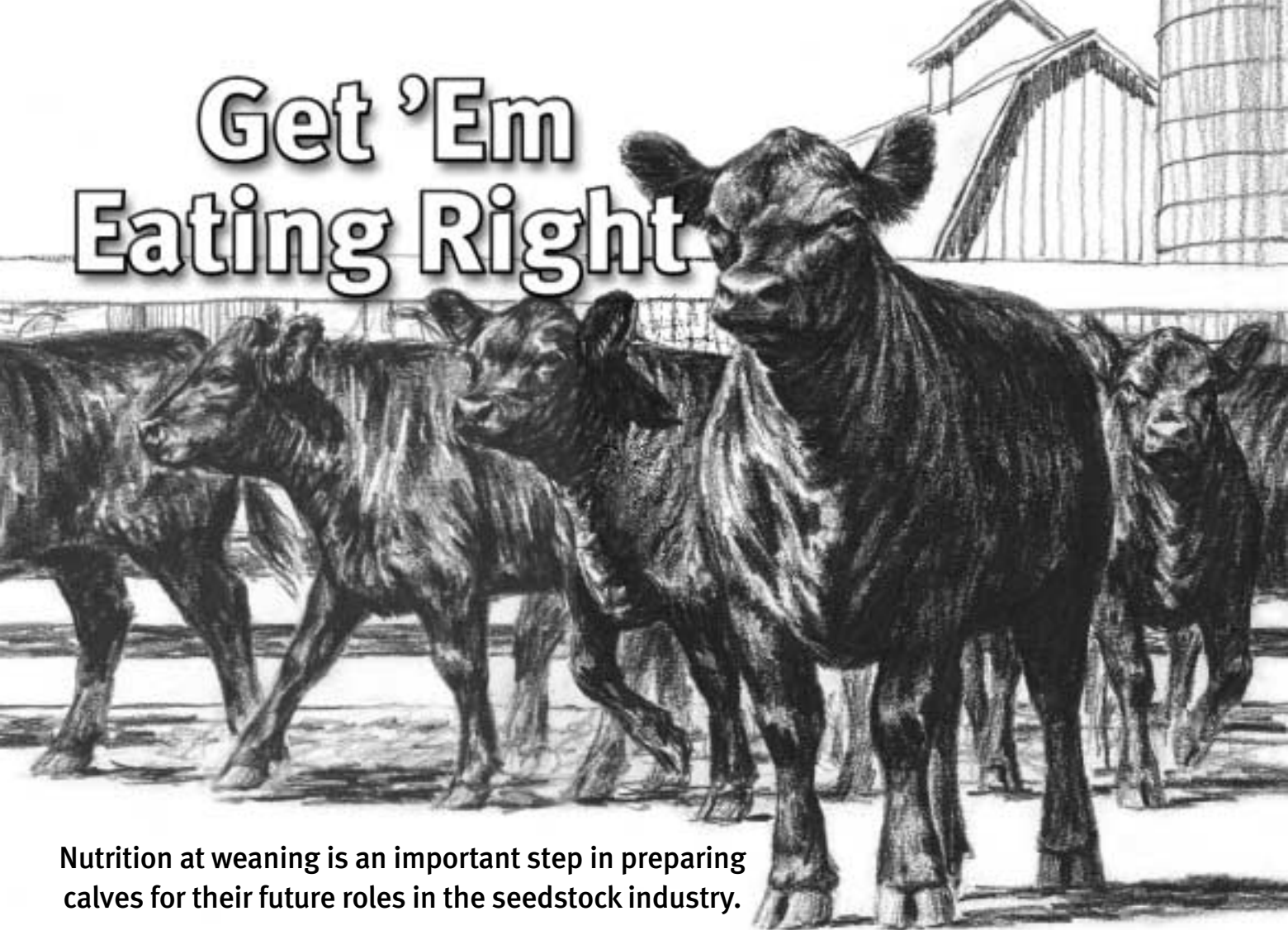


Get 'Em Eating Right



Nutrition at weaning is an important step in preparing calves for their future roles in the seedstock industry.

by *Corinne Blender*

Pediatricians say good eating habits can be developed at a young age. Providing toddlers with the right types of food at the right time is a big part of getting them started on a successful diet for a healthy life.

Getting toddlers to eat their green vegetables may seem similar to the scenario beef producers face when trying to get their calves to eat a concentrate at weaning. Training calves to eat a ration may be a challenge, but it's an important step toward their development into healthy, productive seedstock.

Producers may prepare their calves for weaning by vaccinating or introducing a little grain mixture or creep feed into their diets, but a nutrition plan for the calf starts before it is born.

Taking care of the cow herd is important in preparing calves nutritionally for the weaning process, says Matt Poore,

beef specialist at North Carolina State University (NCSU). Cow management should involve providing trace minerals and high-quality forages to the cows, which, in turn, benefit the calves while at their mothers' sides.

If the calves are healthy going into the weaning process, they will be able to face the stress of weaning more readily. Rick Rasby, beef specialist at the University of Nebraska-Lincoln, says once calves are weaned, it is vital to get them to begin eating as quickly as possible.

"The data would suggest that the quicker that we can get calves, especially weaned calves, eating a ration, we reduce morbidity and mortality," Rasby adds.

What they like

Prior to weaning, calves may nibble on grass, gaining essential nutrients. Most importantly, they learn to eat feedstuffs besides milk and become familiar with grass. Grass hay is a common denominator in nearly

every cattleman's weaning nutrition program because of its familiarity to calves.

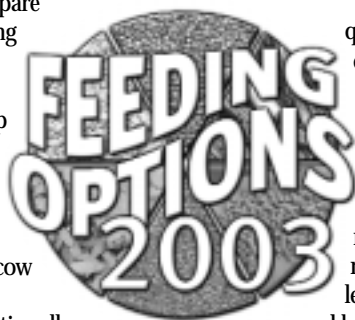
Cody Jorgensen, an Ideal, S.D., Angus breeder, says he turns weaned calves into a weaning pen where the bunk has been filled with processed, long-stem grass hay. The following day, a corn-silage mixture is added to top-dress the remaining hay. Jorgensen Land & Cattle is home to 1,000 mother cows, and the ranch grows all of its own feedstuffs.

Getting calves to eat readily within the first day or two may require getting into the pen with the calves and coaxing them to the feedbunk, Poore says.

"If the calves stumble across a feed that has good-smelling concentrate and good-smelling hay, they will stop and nibble a little bit," he points out. "Once the feed has their attention, they will eat a little bit and then go back to bawling. If you keep them moving around and keep them pushed back to where the feedbunks are while you are trying to get them to eat, it helps get them started."

Poore cautions that producers may want

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to use a legume-mix hay, but straight alfalfa hay is probably not a good idea because most calves are unfamiliar with it.

Concentrate ration

A commercial, pelleted ration may be an option for 2-3 weeks after weaning to get the calves started. So, what should you look for on a feed tag? Rasby says that question is a tough one to answer. There are a host of factors, many of which are dependent on location, that should be considered when looking for a nutrition program for calves.

"You need to get a ration that's high in quality. And that means that it is going to be able to meet the calves' protein and energy requirements, as well as their vitamin and mineral [requirements]," Rasby says. "That weaned calf has a small rumen, so the intake is not going to be very high. For the amount that they are going to eat, the quality of the ration has to be high."

Many parents have experienced it with their own toddlers. Food providing the essential nutrients the youngster needs is presented on the high-chair tray. But table food is something new to the child, and sorting and playing with it means some food ends up on the floor or on the child's lap. It doesn't contribute to the diet as it should.

Weaned calves are no different. If certain feed ingredients have a better taste and are large enough to sort out, a calf may go after that part of the meal and miss out on important nutrients, Rasby says. If you are buying a commercial ration, open the bag and examine the product for uniformity.

Another quality to consider is dust.

"Weaned calves don't like dusty rations," Rasby says, so look for a commercial ration or a ration that you have developed that's not dry. If a producer is mixing his or her own ration, he recommends adding a wet feed, like liquid molasses or a little bit of fat, to keep the dust down.

Balancing act

Producers and nutrition specialists identify crude protein (CP) as an important common element in a ration. Poore says weaning rations are targeted at 16% protein, but 13%-14% is common, too. The important consideration about protein in these diets, he says, is that it comes from a high-quality, natural source. Soybean meal is a common protein source in his area.

In 1996, National Research Council (NRC) researchers reported CP was not the only protein factor to consider, Rasby says.

Degraded intake protein (DIP) and undegraded intake protein (UIP) are especially important in a young, growing calf's ration. Rasby recommends working with a nutrition specialist or an Extension specialist who is good at balancing rations.

"The energy density and the protein content of the ration is going to be based on the calf's weight and also the type of average daily gain that you are wanting to achieve," Rasby says.

Example ration

Jorgensens balance their rations for bulls and heifers separately. The bulls are fed a 48 megacalorie (Mcal) ration that consists of 64.8% dry matter (DM) and 13%-14% protein. Target gain for the bulls is 2.75 pounds (lb.) to 3 lb.

The ingredients are incorporated into a total mixed ration (TMR). The percentages are:

- ▶ Nutra Beef, a Cargill product that contains Rumensin® — 2.9%;
- ▶ rolled, dry corn — 7.9%;
- ▶ corn dry distiller's grain — 4%;
- ▶ high-moisture, rolled corn that has gone through a fermentation process — 23.6%;
- ▶ processed grass hay — 17.6%; and
- ▶ corn silage — 44%.

The heifer ration is targeted at 1.2 lb. of gain and consists of three feedstuffs:

- ▶ R500 liquid — 2.3%;
- ▶ corn silage — 85.3%; and
- ▶ processed grass hay — 12.4%.

Once a producer knows what the feed mix will be, Jorgensen says it is all about reading the bunks. He calls his work the "step-up program." Baby steps are taken to get calves on full feed during a period of time based on the calves' licking of the bunk, or eating all the feed.

It's the same principle that parents take with young children and dessert — no chocolate cake until the plate is clean. Don't give the calves more feed until they have proven they will clean the bunk of what's been provided.

"When you drive by with the feed wagon, you want about one-third to 40% of the calves coming at the bunk pretty strong," Jorgensen says. "You don't want them tearing that bunkline down to get at you — that means you need to feed them more. But if you have about 40% of them coming pretty active, and then the other ones stand

up and stretch and nonchalantly come, that's what you are looking for."

When the bunks are slicked, he'll increase the feed no more than 5 lb. to 10 lb. per head and keep them at that level for about five days. "Don't ever up them two days in a row. That gets dangerous," Jorgensen says. If they are still active after five days, then up the amount again until they are on feed at the desired level of gain.

If calves are stepped up too quickly and begin to back off feed, it may mean backing off and starting over, Jorgensen says. Especially with younger calves, he adds, keeping them a little hungry is probably better, especially if you are medicating them through the feed. It's important that the calves get all the nutrients provided by eating all the feed.

Hints

"If you are putting together your own ration, look for ingredients that are economical. How does corn fit into the ration? How do grain co-products work into the ration? Make feedstuff selections as economical as possible," Rasby says. There are many feedstuffs available, and neither Rasby nor Poore favor one over another.

Another important factor, Poore points out, is that the weaning lot may be the first time calves have been faced with a water tank. While on pasture they may have had a pond or other watering source, but water is one of the most important nutritional elements when weaning.

"Sometimes calves need a little introduction to the water," he says. "Having a hose that trickles down into a tank or something like that the first day may help them realize that there is water over there."

The environment should also be comfortable for the calves. Jorgensen says they have a system in place to wet down the lots if dust is a problem. Mud may also be a problem, so select a site that drains well.

Poore says calves should be allowed ample bunk space — 1 foot (ft.) per calf is an ideal target. The group size may also be a concern if a producer is weaning more than 50 calves. Even if the pen structure is strong, he points out that something must give when calves run, and a pileup may be costly.

Nutrition at weaning is key to a producer's operation. Poore says a high-quality ration is vital. "You don't want them to loose ground during that time. You want them to come through it easy and then take off and grow."

