

## Review the basics of transition cow care

You need to keep them eating, and clean, dry, and comfortable every day.

**E**VER feel frustrated having a well-balanced ration delivered to close-up and fresh cows, yet too many cows still get off to a slow start? The transition period is truly a "glass ball" that can't be dropped without large financial losses. When I say "transition cows," I'm talking about the three weeks before and two to three weeks after calving.

Why do we see so many challenges with fresh cows, regardless of herd size? For one thing, there's more to a successful transition



**CONSISTENCY IS VITAL** when feeding and caring for transition cows. Do everything you can to keep them eating and stress-free.

than just good nutrition. We need to build on good nutrition and then implement a relatively simple system that focuses on cow comfort, providing day-to-day consistency, and having the ability to monitor the results of people's actions.

### Work on consistency . . .

Consistency in cow comfort and people determine whether good nutrition succeeds or fails. Specifically, there's a need for more emphasis on cow comfort and bunk management. Transition cows must be able to rest, eat, drink, and move about freely without competition in an area with ample air exchange and no heat stress. Creating this environment often can be accomplished for a relatively moderate cost.

Cows will vary by size, age, social dominance, and prior adaptation, and all of these affect their ability to cope with stress. Consider how first-calf heifers are challenged if put in with older cows under crowded conditions.

Rick Grant from the University of Nebraska suggests that the impact of regrouping cows affects resting and eating for three to seven days. Consider that close-up and fresh cows are constantly being

regrouped, and you can see why they may require more space to achieve ideal cow comfort.

High production and good health largely are a result of minimizing cows' exposure to stress. Imagine the improvements seen when muddy pens are improved, heat stress is minimized, or adequate bedded pack space is available. Whenever a cow is not comfortable, she will eat less.

### Stress changes behavior . . .

Air exchange and ventilation are important regardless of facility. Ensure that fresh air is moving at the cow's face level, dissipating the heat and moisture produced. Ideally, temperature should be maintained between 10° and 70°. When the temperature-humidity index (THI) is 72 or greater, fans usually are required to maintain at least 2 to 3 mph of wind movement at the cow's face to maintain normal resting and eating. When the THI begins to move above 72, cows will begin to spend more time standing and begin to crowd together seeking shade (bunching behavior).

As THI moves higher than 72, there will tend to be more slug-feeding which hurts rumen function. Fans won't change the calculated THI in the barn, but fans and other means of cooling will minimize the effects of a higher THI. I strongly recommend fans in transition confinement housing.

For cows eating outside, consider properly designed shading over the bunk. Inside, you can improve air exchange significantly by removing the outside wall coverings and opening ridges. Remove any weeds or other air barriers outside the barn. During cold weather, air exchange also is important to avoid respiratory problems. Water should not drip from inside roofs.

### If they stand around . . .

Remember, high-producing cows don't normally just stand around. If you see cows standing yet not eating, drinking, or in heat, you might suspect that air quality, heat stress, or both are an issue.

Our focus on having enough bunk space, in a sense, has distracted from the core purpose of bunk management. It's not really about "inches of bunk." Rather it's the ability of a cow to eat a fresh, nonsorted, high-quality, consistent ration. This includes eating all she wants, when she wants it, without competition.

Too often, people feed baled hay or silages that tested well at the lab but for various reasons are not palatable. Try to minimize variation in the quality of forages.

Abrupt changes are a cause of many "wrecks" with fresh cows.

Closely monitor forage moisture changes due to heavy rains. Always say "no" to mold. Throw off all moldy feed. Feed which is heating or warm must be avoided. If snow or rain hurt feed intake, remove the ration and replace it with fresh feed. Wasting a little feed is better than dealing with a DA caused by a cow that refused to eat for 12 hours because of wet or moldy feed.

Monitor the ration for sorting that may occur over a 24-hour period. Feed refusals should appear similar to the original ration. Always avoid overmixing which reduces effective fiber levels.

### What about headlocks?

Although there's been some controversy, current field experiences suggest either headlocks or post and rail bunk systems are comparable if properly designed. But cows do prefer to eat from a floor manger and will waste more feed with an elevated "H-bunk" design.

One key is having springing heifers adapted to headlocks before entering the prefresh pen. Ultimately, there must be a way to restrain and handle transition cows safely. Cow space, stocking density, availability of fresh feed at all times, distribution of waterers, and the consistency of the ration and feeding will influence feed intake more than the choice of headlocks versus a post and rail design.

Whether housed in free stalls, bedded pack, or drylots, cows must have cushion and fresh air exchange at the face when lying down, their udders in a dry and clean spot, lunge space, and ability to get up without obstruction or injury.

You can calculate a stall comfort index by dividing total number of cows lying properly in stalls by total cows occupying stalls (those lying down properly and improperly) and multiplying by 100. Don't include cows standing outside the stall for any reason in the calculation. Strive for an index of 85 to 90 percent or higher.

### Don't overlook water . . .

Typical water intake for a dry cow will be around 7 to 13 gallons per day, with fresh cows drinking in excess of 20 to 30 gallons.

The ability to deliver adequate water to transition cows is a bottleneck seen on many dairies. Too often, there is only one small waterer for either the close-up or fresh cows. Make sure you provide plenty of water trough space per cow. Provide two or more waterers per group if possible to account for boss

cows. I prefer shallow waterers with less than 10 to 12 inches of water depth since they are easier to keep clean. Invest in waterers that easily can be flushed daily and scrubbed weekly during warm weather.


An alley with less than 12 feet of open width (14 feet with the waterer) can limit water intake due to cow competition and inhibited cow traffic. Be careful locating waterers directly next to a bedded pack where water will be spilled and tossed, causing a wet, messy bedded pack that cows will choose to lie in during warm conditions.

### Exercise needed . . .

We don't know a lot about the need for exercise. My observations are that cows in ideal body condition for the three weeks prior to calving, that are very well managed and fed but lack any regular exercise, can still have metabolic problems at calving. Specifically, I have seen this in good herds where close-up cows have been in tie stalls for two to three weeks before calving.

Provide adequate alley space in free stall barns. Avoid having more than one transition cow for every one free stall. With a bedded pack, maintain at least 100 square feet per cow.

Restrain cows in tie stalls or smaller maternity pens for as short a time as possible. Open drylots or other well-managed dirt or grass lots work well for close-ups.

Trials have shown cows and springing heifers will eat less and have more problems before and after calving if overconditioned . . . a score of 4 or over. Heavier cows also will tend to lose more weight after calving which, in turn, affects reproduction. A good body condition range for cows is from 3.0 to 3.75. Generally, it's agreed on that heifers should calve in a body condition closer to 3.25 to 3.5. 

### For more on transition cows

If you want to learn more and hear directly from experts on transition cow care, you can purchase the Four State Dairy Extension CD ROM, co-sponsored by Monsanto. The CD ROM contains more than 40 presentations (power points with audio and streaming video) presented by 19 different veterinarians, ag engineers, and nutritionists in 10- to 20-minute, easy-to-listen-to modules for review at your home or office when you have time. The cost is \$25. To order, visit the website at the following URL: <http://www.outreach.uiuc.edu/cdorders/>

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