

# 10 MUST-DOS FOR TRANSITION COWS

Top performing dairies do all of these

BY JIM DICKRELL

**T**he transition period will make or break a lactation and possibly the entire productive life of a dairy cow.

Do it right, and cows are primed for healthy, productive lactations. Do it wrong, and cows can become early cull candidates.

“Shift your mindset from the transition cow as a disease opportunity to the transition cow as a production and reproduction opportunity. Begin with the end in mind,” says Tom Overton, a dairy management specialist with Cornell University.

The goals should be to optimize milk production, maintain or minimize the loss of body condition score, metabolic disease and immunocompetence, control days to first ovulation and birth healthy calves. “Our high performing dairies do all of these,” Overton says.

To achieve these goals, Overton has a top 10 list of feeding and management strategies:

**1. Manage macromineral/DCAD of dry cows,** especially in the last two to three weeks before calving. Feed low potassium and sodium forages, along with anionic supplementation. The amount of anionic supplement will depend on the calculated DCAD content of the ration. Also supplement with magnesium and calcium as needed.

**2. Control energy intake in both far-off and close-up diets.** Too little can be as bad as too much.



Do transition cow management correctly, and cows are primed for healthy, productive lactations.

## Particle Size Recommendations Using Penn State Particle Separator

Screen	Lactating Cow TMR	Dry Cow TMR	Corn Silage	Hay Crop Silage	Straw/Dry Hay for TMR
> 0.75" sieve	6% to 10%	10% to 20%	5% to 10%	10% to 20%	33%
0.31" to 0.75" in sieve	45% to 55%	50% to 60%	45% to 65%	45% to 75%	33%
Bottom (< 0.31" in sieve)	<50%	<40%	30% to 40%	20% to 30%	33%

*Adapted from Penn State guidelines by T. Overton September 2013*

### 3. Supply enough metabolizable protein before calving.

The emphasis should be on bypass protein sources and amino acids.

### 4. Get the feeding management right—every day.

Minimize sorting. The longest straw or hay particles should be less than 1.5". The dry matter content of the TMR should be 46% to 48%. Add water if necessary.

### 5. Provide clean, comfortable housing and fresh water.

Large, well-groomed stalls or clean, dry-bedded packs are essential to cow comfort.

### 6. Manage social interactions and group hierarchy.

Stocking densities of less than 100% are recommended with plenty of bunk space. Also avoid commingling first-calf heifers with older cows, and minimize group changes as much as possible.

### 7. Manage heat stress.

Heat stress during the dry period can result in decreased birth weight of calves, greater incidence of passive immunity transfer failure, poorer immune function of both dam and calf, poorer feed efficiency and decreased milk production during first lactation.

### 8. Offer high quality forage and fermentable diets to fresh cows.

High levels of indigestible forage neutral detergent fiber limits how much a cow can eat, reducing rate of passage and feed intake.

### 9. Strategically use feed additives and specific nutrients.

Choline helps the liver export fat and improve performance. Amino acids improve performance and immunity. Chromium propionate helps energy metabolism, immune function, dry matter intake and performance. Additives such as monensin can improve energy metabolism and postpartum dry matter intake. Yeast products can improve rumen function, dry matter intake and performance.

### 10. Implement cow- and herd-level monitoring programs.

Cow-level monitoring is most beneficial for making diagnosis and treatment decisions for individual animals. Weekly herd-level monitoring, such as urine pH or ketone testing, helps indicate when changes to feed or management might be necessary. **DH**