

# Dry Cow Checklist For Success



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My goal as a Dairy Nutritionist is to maximize profit for a dairy herd. Herds on the Crystal Creek® Dairy Nutrition Model (CCDNM) have been able to increase profit through improved transition cow health. Cows that transition well have less metabolic problems, get on feed faster and breed back sooner; resulting in decreased cost for the producers, more milk in the tank and increased on farm profit! How do producers on the CCDNM get better transition cow health? These producers focus on their dry cow nutrition program.

**There are four main categories to evaluate when looking at a dry cow nutrition program:**

- 1. Nutrition (targeted and balanced)**
- 2. Feed Mixing**
- 3. Feed Delivery**
- 4. Feed Access/Availability**

## *1. Nutrition (Targeted and Balanced)*

The day to day diet of a dry cow can have tremendous impact on fresh cow health and lactation performance. Improper cation (calcium and potassium) balance can cause milk fevers (\$334 to treat=lost profit) and unbalanced energy levels can lead to ketosis (\$145 to treat=lost profit). Here are some factors to consider when balancing a dry cow diet:

### A. Grouping

It is desirable to have two groups of dry cows. The far-off dry cow group would include cows that are 60 days to 3 weeks pre-fresh. The close-up dry cow group would include cows 3 weeks pre-fresh to fresh. Ration requirements are significantly different for each group and producers can minimize feed costs by separating dry cows into these two groups. It is important to avoid unnecessary pen moves during the dry period as it causes social disruptions (stress) leading to reduced dry matter intake.

### B. Dry Matter Intake

Monitor dry matter intake of the dry cow groups very closely. Contact your dairy nutritionist if there is too much weighback or no weighback at all. There should be between 3 and 5% weighback. Regularly sample dry cow forages for moisture and quality to verify the ration being fed.

### C. Ration Energy

Maintain body condition during the dry period. Aim for a body condition score of 3.8 to 3.9 for dry cows. Animals that gain or lose body condition during the dry period are more susceptible to ketosis when they freshen. Work with your dairy nutritionist to maintain body condition in your dry cows. The best time to restore body condition on thin cows is at the end of lactation before they become dry.

### D. Ration Crude Protein

Protein levels should vary from 12.5% to 13.5% between the far-off and close-up groups to meet nutrient requirements. Rations too high in crude protein are unnecessary and can be costly.

### E. Calcium/Potassium Levels

Focus on total grams of combined calcium and potassium. Rations too high or too low in cations can potentially cause milk fevers and retained placentas. Forages being fed to the dry cows should be tested for quality to control total grams of calcium and potassium being fed to the dry cows. When balancing a ration, this category is a top priority. If calcium and potassium are not within range, cows are more likely to have problems at freshening which will decrease overall profitability.

### F. Sodium Levels

High sodium levels in the dry cow diet will cause udder edema when the animal freshens. Producers with one group of dry cows should eliminate access to free choice salt and remove salt from the ration. Farms with two groups of dry cows can feed a small amount of salt to the far-off dry cows, if necessary, but remove access for the close-ups. As a side note, if there is an animal that has udder edema when she freshens, use our Veterinary Dairy Liniment™ to reduce the swelling.



### G. Available Feedstuffs

Adequate dry cow feedstuffs are sometimes hard to find. Most producers grow hay with the intention of feeding it to the milk cows and then the lowest quality forage harvested that year gets fed to the dry cows and heifers. Producers should focus on growing a crop specifically for the dry cows. Ideally, grassy hay or balage with a combination of corn silage works best for dry cows. Corn silage should be fed no more than 50% of the ration on a dry matter basis. Small amounts of grain are usually needed to balance out protein and energy levels. Mix Crystal Creek® Dry Cow Mineral into the grain to provide the needed mineral and vitamin levels. Straw should only be used as a last resort to dilute out energy, calcium and potassium levels. Nutrient blockers such as clays, charcoals, humates

and diatomaceous earth should be avoided.

### H. Molds/Mycotoxins

Test the overall ration being fed to the dry cows for molds and mycotoxins. Molds and mycotoxins can tie up nutrients in the diet and can cause major health problems when the cow comes fresh. Contact a Crystal Creek® Nutritionist for more information on how to test for mycotoxins in your feed.

### I. Water

Water is a nutrient that is sometimes easy to forget. Dry cows can consume 8 to 12 gallons of water a day. Make sure there is adequate access to water. Aim for 2" of linear water space per head. Clean waterers frequently to reduce bacteria load. Water quality

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should be tested yearly. Maintain water temperature so that it does not freeze.

### 2. Mixing

Producers using TMR mixer wagons should be evaluating ingredient mixing order, batch sizes and overall uniformity of the ration being fed. TMR rations being fed to the dry cows usually have the biggest variability because of the small batch size being mixed. Please refer to Brian Hoffelt's article on page 2 of this newsletter on TMR mixing.

### 3. Delivery

Delivery of the ration should be at the same time every day. Make sure to clean out the bunk before feeding the new ration for the day. Old feed can become moldy and cause detrimental side effects. Feed should be fed on a cement bunk or feed wagon and free choice bales should be kept out of the mud.

### 4. Access/Availability

A balanced ration was formulated, it was mixed properly and it was fed to the dry cows but can the cows eat it? Dry cows require 30" of bunk space per animal. Overcrowding will reduce overall bunk space and reduce access to feed. Feed should be pushed up on a regular basis to maintain access to feed all day. The dry cows should never have an empty bunk. "Empty Bunk Syndrome" could send the animals into ketosis when they come fresh, reducing profitability. Ideally, there should be 3 to 5% weighback.

## Other factors to consider when evaluating a dry cow program:

### 1. Housing

Avoid overcrowding dry cows at all costs. There should be one cow per stall. Freestalls for dry cows should be 52" wide. If dry cows are in a bedded pack, there should be at least 100 square feet area per cow. Install headlocks or a chute to administer vaccines and make observation easier.

### 2. Environment

The environment can have a huge impact on how the animals utilize their feed. Heavy fly pressure and



heat or cold stress are environmental conditions that can easily be managed. Use fly repellents (Crystal Creek®'s No-Fly™), tapes and strips to reduce flies. Heat stress begins at 70°F. Feed Crystal Pellets™ at 2 to 4 oz./head/day to help cope with the side effects of heat. Animals on pasture should have shade available as well as access to fresh water close by.

### 3. Vaccinations

Administer no more than two gram negative vaccines at once. Common combinations are Scourguard and J5 at dry off. Make sure not to give any vaccines during the transition period. Modified live vaccines are commonly given between 21 to 35 days in milk.

### 4. Transition Cow Management

Having a well designed dry cow program will help cows transition into lactation better but producers still need to identify high risk animals and implement a transition cow protocol. High risk animals include animals that were lame in the dry period, have milk fever at freshening or gained or lost weight in the dry period. These animals should be nutritionally supported after freshening to help maintain feed intake and milk production. Choosing a transition cow protocol for your herd will be key for successful transition into lactation. Refer to Crystal Creek®'s Transition Cow Protocol on page 23 of the 2013 catalog for different nutritionally supportive options.

Dry cow and transition cow management are the keys to a profitable dairy herd. Crystal Creek®'s dry cow program helps to make it easy to reach these goals. Give us a call and get started today!