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College of Veterinary Medicine

VETERINARY CONTINUING EDUCATION



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## **Managing The Transitional Cow**

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The transition period from the dry cow maintenance nutrition level 3 weeks before calving to peak milk production 3-5 weeks after the stressful time of parturition requires changes in feeds and nutrient concentrations (and dry matter intake DMI) to meet the changing needs of the cow during the stress of parturition and rapidly increasing milk production. Many dairymen feed rations during this period that should not work, but do. In those situations, you may not want to fix it, it might break. As an advisor or consultant you may want to point out the potential problems that may arise and let the producer decide what to do. Changes in feed stuffs and quality of feeds, comprise considerable challenges to the nutritionist in ongoing ration advising.

### **Transitional problem list:**

Milk fever, Metritis, Retained Placenta, Ketosis, Fat Cow- Fatty Liver, Downer cow, Mastitis, Indigestion-Off Feed- Acidosis, Laminitis (lameness), Pneumonia, Milk production

### **Nutrients that are increasing in requirement:**

Dry Matter Intake, Energy, Protein, Calcium, Phosphorus, NaCl, Trace minerals, Other.

### **Products to prevent (or induce if mismanaged) diseases or reduce disease incidence:**

Recommended Mineral Balances  
Computer feeders, TMRs  
Anionic salts, Na Bicarbonate  
Niacin, Yeast  
Propylene Glycol  
Bypass proteins (Palatability)

Approaches to transition period problems, assessment of and making recommendations or plans for a new dairy production enterprise.

1. Define the housing and feeding system. Each system has some peculiar sets of problems; new, current or old.

Ideal conditions? Exercise for dry cows in a clean environment. Diet tailored to body condition. Use of the cheapest forages and feeds.

## 2. Feeding Guidelines or Thumb Rules

- a. To increase energy, Ca, P, Salt, and Vitamins, and additives, increase grain 1 lb per day. Greater increases in grain feeding rates increase the risk of acidosis, off feed, and other symptoms of excessive grain increases.
- b. Provide enough mineral shortly before calving to meet increasing requirements. With anionic salts, must start feeding anionic salts 3 weeks prior to parturition, remove them day of calving and introduce cow to lactation diet.
- c. Feed Quality, Always avoid moldy or heat damaged feed. Experiences have revealed that cows already on high amounts of grain can tolerate some damaged feeds. However, cows just starting on feed which is damaged, may experience an increased incidence and severity of post-parturient disease problems.