

How to Get More Cows Pregnant



By Ryan Leiterman, D.V.M.

Efficient reproduction is a necessary component for any dairy to remain profitable. Despite improvements in reproductive programs, many dairies still struggle with poor conception rates. The veterinary industry has been trained to investigate herd

infertility problems by looking for infectious causes of infertility, manipulating vaccination protocols or adjusting hormone treatment protocols. By focusing on infectious causes of infertility or simply trying another hormone protocol, many veterinarians are missing the big picture on reproductive efficiency. Dry cow management and nutrition is one of the most important and controllable management factors affecting reproductive performance. Dry cow nutrition is directly related to transition cow performance and the prevalence of fresh cow diseases such as ketosis, retained placentas, metritis and mastitis. These fresh cow diseases have been shown to have a direct and negative impact on reproductive efficiency.

Fresh cow diseases decrease conception rates.

Cows with milk fever are 4 times more likely to have a retained placenta and 2.3 times more likely to have a left displaced abomasum (Curtis et al., 1985).

Cows with a left displaced abomasum are 1.8 times more likely to suffer from another fresh cow disease (Detilleux et al., 1997).

Cows with a retained placenta are 16.4 times more likely to suffer from ketosis (Correa et al., 1993)

Cows with metritis have a typical delay of conception of 35 days when compared to disease free counterparts.

Cows suffering from only one fresh cow disease (retained placenta, metritis, mastitis, ketosis, LDA) have a first service conception rate of less than 35%. Cows with a disease free transition period have a first service conception rate of greater than 50% (Ferguson, 1999).



How to improve transition cow performance; subsequently improving herd reproduction.

Focus on the nutrition and housing during the transition period, which is defined as three weeks prior to and three weeks after calving.

Maintain 30 inches of bunk space for each close up dry cow.

What is the point of focusing on proper dry cow nutrition if competition at the bunk reduces dry matter intake?

Maintaining 30 inches of bunk space per cow during the close up dry period reduces competition and has been shown to increase dry matter intakes and reduce incidence of fresh cow diseases post calving.

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Focus on foot health and lameness in the dry period.

Lame cows do not make as many trips to the bunk to eat and when they do; their time at the bunk is reduced. Lame cows often struggle to rise and as a consequence they become more reluctant to lie down. Reduced dry matter intakes and reduced laying time cause a loss in body condition during the dry period, triggering excessive fat mobilization during the fresh period which incites a cascade of fresh cow diseases. Cows with body condition score losses >1 during the transition period have: longer times to first estrus and first ovulation, lower progesterone concentrations and lower first service conception rates (Britt, 1991).

Balance the close up dry cow ration.

Nutrition is paramount to a properly functioning immune system in all animals. Deficiencies of trace minerals and fat soluble vitamins have been related to retained placentas and compromised immune function problems (Van Saun, 1991). Specifically, the role of vitamin E in the transition cow diet and its impact on decreasing fresh cow mastitis has been well documented (Weiss, 1990).

In conclusion, reproductive success on a dairy is achieved only once a balance of many factors are operating in harmony. It is naïve and short-sighted to address something as complex as a herd infertility problem by simply changing the breeder or manipulating a "shot" protocol. Herd infertility is



a complex issue and a holistic approach has to take into consideration dry cow nutrition and its impact on fresh cow health and performance when creating a plan to improve reproductive efficiency on a dairy.

At Crystal Creek®, we put a priority on dry cow nutrition and view it as a tool for unlocking a herd's full potential. Our entire line of dairy minerals are formulated using the highest bioavailable minerals and vitamins to ensure your herd is receiving the proper nutrition necessary to support its success. Call today and speak with one of our dairy nutritionists to discuss your dry cow and transition cow rations and learn about the positive impact a properly formulated ration can have on your dairy.

Crystal Creek® Welcomes Julie Wadzinski

Julie graduated from the University of Wisconsin-River Falls with a Bachelor of Science degree in Dairy Science and a minor in Sustainable Agriculture. She was an active member in the Professional Agricultural Sorority Sigma Alpha, the Honors Fraternity of Alpha Zeta, and served as Vice President of the College of Agriculture and Food Sciences Student Advisory Council.

Julie's interest in agriculture started early on her family's dairy farm where her responsibilities included milking, breeding, feeding and care of post fresh transition animals. Her interest in farming has been nurtured through 4H projects and FFA activities. Julie's dairy experience has been developed through involvement in many aspects of the industry, from working on various sized farms from tie-stalls to freestalls and learning the

purebred industry through an internship with the Red and White Dairy Cattle Association. Her areas of interest include post fresh cow care, dairy nutrition, hoof trimming and red and white dairy cattle.

In her spare time, Julie enjoys reading, scrapbooking, hunting, and camping.

