ReaShure®
Precision Release Choline

EXTENDED DRY PERIOD

Managing Transition Cows Through Long Dry Periods

There are many situations on the dairy that may lead to a cow being dried off early or having an excessively long dry period.

While most cows gain weight during this time, those with extended dry periods are prone to gaining excessive body weight which can cause severe issues for the next lactation. Cows carrying excess condition are prone to greater incidence of ketosis, displaced abomasum and retained fetal membranes at parturition.

Fortunately, there are two nutritional strategies that can mitigate these issues for your cows.

NUTRITIONAL STRATEGY 1

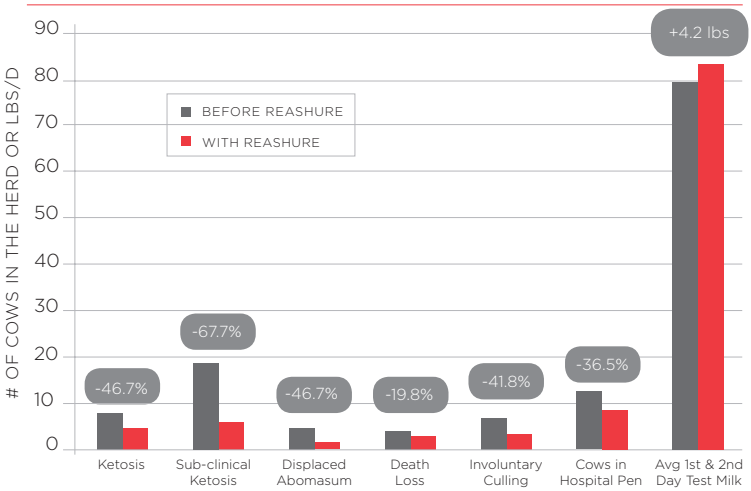
Increase Fat (NEFA) Utilization with ReaShure® *Precision Release Choline*

Over-conditioned cows will need help to better utilize their valuable fat resources; converting them to milk-producing energy. Choline is the only known compound to facilitate this conversion of body fat to milk production. Choline is a fundamental component in transporting mobilized body fat through the liver and to the mammary gland where it is converted to milk and milk components. Feeding ReaShure during the transition period has benefits far beyond just helping over-conditioned cows manage their fat resources, it can help provide a smoother transition from the dry pen to the lactation string by supporting liver health and efficiency.

A trouble-free transition can:

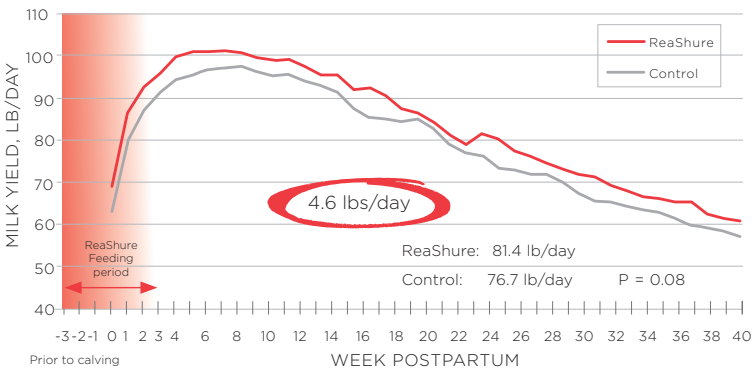
- **Reduce Metabolic Disease -** Choline is essential for supporting liver health and performance, leading to a smoother, healthier start to the cow's lactation. Reducing transition cow problems is imperative for reducing disease-related costs, death loss and involuntary culling.
- **Boost Peak Milk Production -** Raise the trajectory and output of the entire lactation. In the study at the University of Florida, cows fed ReaShure during the transition period had higher peaks and produced an additional 4.6 pounds of milk per day during the 40-week trial period. That resulted in 1,406 pounds more milk per cow over the lactation.
- **Improve Calf Growth and Survivability -** New research from the University of Florida demonstrates a link between prenatal choline supplementation and calf performance. Maternal consumption of ReaShure during late gestation had a positive effect on growth and survivability of neonatal heifers during the first four weeks of life. That effect was further enhanced by feeding colostrum from dams receiving ReaShure.

TABLE 1 ON-FARM RESULTS WITH REASHURE®



Real Results Challenge data, 112 herds, 226,630 cows

TABLE 2 EFFECT OF FEEDING REASHURE® DURING TRANSITION ON MILK PRODUCTION OVER 40 WEEKS



Zenobi et al., 2018 . J. Dairy Sci. 101:1088

NiaShure™
Precision Release Niacin

EXTENDED DRY PERIOD

NUTRITIONAL STRATEGY 2

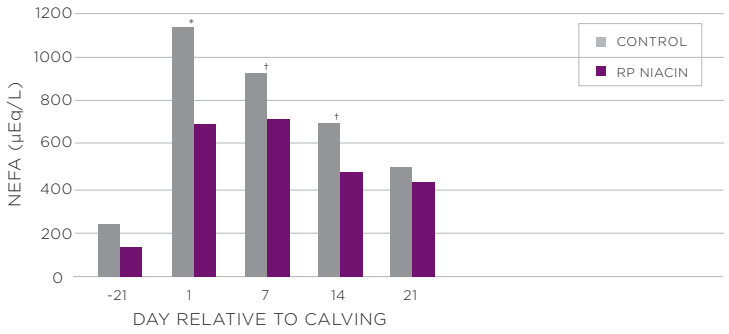
Reduce Fat Mobilization with NiaShure™ *Precision Release Niacin*

For severely fat or problematic cows it may be necessary to reduce blood NEFA levels pre-partum by lowering the amount of fat mobilized from body stores. Niacin is widely recognized as a potent anti-lipolytic agent capable of reducing the surge in NEFA seen prior to parturition. Niacin acts on fat cells to reduce the amount of lipid being mobilized leading to lower prepartum blood NEFA levels. Niacin is generally not recommended for use postpartum to reduce fat mobilization because the cow requires NEFA and ketones to provide essential energy for lactation. Feeding NiaShure postpartum can lower milk fat % and energy-corrected milk in very early lactation. However, if ketosis is persistent postpartum it may be beneficial to feed NiaShure in the fresh cows in addition to feeding it to the dry cows.

Reducing body fat metabolism in fat cows can:

- **Reduce Ketosis and Related Transition Cow Disorders –** Research at the University of Wisconsin demonstrated a significant reduction in blood NEFA when NiaShure was fed to lactating dairy cows. Lowering blood NEFA levels can reduce ketosis and associated transition cow metabolic disorders.

TABLE 3 UW STUDY–PLASMA NEFA



Yuan et al., 2012

SUMMARY

Cows experiencing long dry periods can, if not managed carefully, be prone to increased incidences of metabolic diseases post-calving which can adversely affect lactation performance. Carefully controlling dietary energy intake in the far-off dry period can help minimize these issues.

Feeding cows ReaShure rumen-protected choline during late gestation and early lactation has been shown to increase milk production throughout the entire lactation, reduce metabolic disorders and, through in utero programing, improve calf health and performance. If cows gain excessive body condition it may be necessary to include NiaShure in the close-up diet to help control NEFA mobilization.

Help mitigate the effects of early dry-off and lower the losses associated with over-conditioned cows. Get them back on track for a smooth transition and successful lactation with ReaShure® *Precision Release Choline* and NiaShure™ *Precision Release Niacin.*

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