Choline is a Required Nutrient for Improving Colostrum Yield & Quality

"Choline dramatically increased colostrum yield – an 85% increase in our study."

-Dr. Barry Bradford, Tri-State Dairy Nutrition Conference, 2023
Colostrum is essential for survival and health of the newborn calf. The cow’s placenta completely separates the dam and fetal blood, preventing immunoglobulin (Ig) transfer during gestation. Therefore, the newborn’s immune protection relies primarily on colostral immunoglobulins absorbed in the intestine during the first few hours after birth.

Recent research from multiple universities suggests that supplementing cows with ReaShure® *Precision Release Choline* during the close-up period can increase colostrum production. Four recent studies represent the entire dataset measuring ReaShure’s impact on colostrum quantity and quality when fed to pre-partum dry cows. Two of the trials showed a large and significant increase in colostrum volume (Swartz et al., 2022 and Holdorf et al., 2023), one exhibited a large and significant increase in IgG (Zenobi et al., 2018a), and one showed no response (Bollatti et al., 2020b).

- ReaShure-XC fed 21 days prepartum
- 2.9 kg more colostrum from ReaShure-fed cows, an 85% increase (P = 0.01)
- Enhanced the yields of choline metabolites
- No dilution of solids
- No dilution of IgG

*Figure 1 Effect of ReaShure-XC supplementation on colostrum yield*
Dairy producers have known for decades that ReaShure can help support a healthy transition into lactation. New research now suggests it can also improve colostrum yield and quality, helping build a foundation for healthier calves. A short-term investment during the transition period can help ease your cow’s transition into a healthy and productive lactation today while paving the way for significant returns in the future as your heifers enter the milking string.*

ReaShure-XC fed 21 days prepartum
- 2,0 kg more colostrum for ReaShure-XC-fed cows, a 57% increase
- No dilution of IgG

ReaShure fed 21 days prepartum
- 212 g/cow (43%) more IgG yield for ReaShure-fed cows (P = 0,04)
- 18,7 more g/L more IgG (27%) for ReaShure-fed cows (P = 0,03)

Download the complete research summary featuring four studies by snapping the QR code at right.

Balchem manufactures two versions of their rumen-protected choline product, ReaShure and a more concentrated form called ReaShure-XC. Both are designed to provide approximately 13 g/d choline ion when fed at the recommended feeding levels (ReaShure = 60 g/d, ReaShure-XC = 30 g/d). One or both of these products were used in the following trials.
Choline is a Required Nutrient for Essentially Every Cow

Milk Production
 Zenobi et al., 2018a
 Arshad et al., 2020
 Bollati et al., 2020a
 Holdorf et al., 2023
 Swartz et al., 2023

Healthy Transition
 Lima et al., 2012
 Zenobi et al., 2018b
 Arshad et al., 2020
 Poindexter et al., 2023

Calf Health & Growth
 Zenobi et al., 2018a
 Zenobi et al., 2018b
 Arshad et al., 2020
 Bollati et al., 2020a
 Bollati et al., 2020b
 Potts et al., 2020
 Swartz et al., 2022
 Holdorf et al., 2023
 Swartz et al., 2023
 Poindexter et al., 2023

Improved Colostrum Quantity
 Zenobi et al., 2018a
 Zenobi et al., 2022
 Holdorf et al., 2023

This new science changes everything we thought we knew about choline's impact on the cow and her calf. ReaShure® Precision Release Choline is the original and most researched rumen-protected choline source, so you can be sure you're getting the benefits you expect. Trust ReaShure and Balchem to impact her for generations. Visit Balchem.com/ReaShure-XC to learn more.