

Supplemental potassium Heat stress and much more!

Potassium (K) is one of the most important nutrients in the ration. Its importance grows during the summer due to its role as an electrolyte and rumen buffer. Few nutritionists feed less than 1.4% K but there are economic arguments for going beyond that level. Potassium affords many performance and risk management benefits. Most nutritionists buy into the benefits of using a buffered form of K, such as potassium carbonate. However, native potassium carbonate can be tricky to use in dairy feed in humid zones, and nutritionists and manufacturers prefer protected potassium carbonates, such as K-Carb Plus.

Supplemental buffered potassium is a key nutritional tool

- **Added potassium can move the butterfat needle.** Higher levels of ration K have very specific actions on the rumen bacteria that work against butterfat production. A quarter pound of K-Carb Plus increases ration K by a little over 0.2%. This may increase milk fat by 0.1 to 0.2 points at a added cost of **\$0.50**. While the ROI on added K is likely break-even relative to butterfat benefits, the additional benefits of K during heat stress and early lactation make added K look more attractive.
- **Buffered electrolytes are key during heat stress.** There is extensive research showing that positive DCAD (Naand K buffers) is highly beneficial during heat stress. Potassium buffer is especially helpful due to increased K losses from sweat. When on-farm heat abatement is poor, increased K is one of our few nutritional tools for helping cows cope. Ration K should be above 1.8% of dry matter during heat stress for maximum effect.
- **Fresh cows need more K.** Potassium excretion is higher in the first few weeks after calving and fresh cows should get 50 to 75 grams more K daily. This also helps to adapt the rumen to the lactation ration and boosts.

Why K-Carb Plus?

- **K-Carb Plus is a technical K source** that is manufactured using a proprietary process that incorporates fatty acids into the crystalline structure of anhydrous potassium carbonate. This process greatly reduces the potential interaction of potassium carbonate with environment moisture and other feed ingredients.
- **Very high potassium at 53% K.** The highest K level in the market
- **Excellent buffer and positive DCAD source** (+1370 mEq/100 grams)