

BALANCING RATIONS FOR NEGATIVE DCAD

WHY IT MATTERS AND HOW TO DO IT

FEEDING A PREFRESH RATION PROPERLY BALANCED FOR DIETARY CATION-ANION DIFFERENCE (DCAD) IS CRITICAL FOR HEALTHY CALVING, A SMOOTH TRANSITION AND STRONG START-UP MILK PRODUCTION.

DCAD measures the levels of four macrominerals in the diet: positively charged cations, potassium (K) and sodium (Na), and negatively charged anions, chloride (Cl) and sulfur (S). By adding these charges together the ration DCAD number is determined.



(SODIUM × POTASSIUM)



(CHLORIDE + SULFUR)



FEEDING A NEGATIVE DCAD RATION PREPARTUM CAN HELP REDUCE CASES OF MILK FEVER AND OTHER METABOLIC DISORDERS BEFORE THEY START.



HOW TO REACH NEGATIVE DCAD LEVELS

- Conduct wet chemistry analysis for Na, K, Cl, S and Mg levels on forages and byproduct commodity feeds (whey, molasses, etc.) that typically have variances in DCAD minerals.
 - While book values represent average DCAD levels, there is often large variability among feedstuffs. Wet chemistry analysis is the only way to know the exact DCAD levels of your feed ingredients and forages.
 - Obtain water analysis since water sources can contribute additional minerals and impact ration DCAD values.
- Reduce as much potassium and sodium as possible in the diet. This alone will decrease ration DCAD levels.
- Adjust DCAD levels to reach -8 to -12 meg/100g dry matter by adding a palatable 3 anion source to the ration.



FEEDING BIO-CHLOR™ IN THE PREFRESH DIET CAN HELP DELIVER NEGATIVE DCAD LEVELS AND SUPPORT DRY MATTER INTAKE LEADING TO LESS TIME SPENT DIAGNOSING TRANSITION ISSUES.