

Animate[®]

Anionic Mineral Supplement

How To Evaluate ANIMATE Efficacy During Transition

A. Consumption, Health and Performance:

- Measure/observe feed consumption; Animate should be readily consumed pre-partum.
- Field observations and university work indicate that Animate can promote an increase in pre-partum and post-partum feed consumption.
- Observe the cows, Animate should provide improved health and productivity by reducing the incidence of hypocalcemia and related metabolic and non-metabolic disorders in the post-partum cow.

B. Urine pH:

- Monitoring urine pH is the best means of determining if more or less anions are needed in the ration. Alkaline rations produce a urine pH of 8.0 to 8.5. The target urine pH is 6.2 to 6.8 for Holsteins and 5.8 to 6.5 for Jerseys. If the urine pH falls to 5.5 and below, there is danger of metabolic acidosis and reduced consumption.
- How many hours after feeding before sampling urine pH? There is some debate on this. If cows are offered fresh feed twice a day it doesn't seem to matter much. Urine pH stays relatively constant throughout the 24 hrs of a day. If fed just once a day the value at 9 hrs after feeding matches up pretty well with the values you get feeding the same diet twice a day.
- How often should we sample for urine pH? Collect urine samples about 2 to 3 days after you start feeding Animate to allow for urine pH to stabilize. This will help to determine if you are on target. Adjust as needed. You can recheck urine pH 2-3 weeks after feeding begins to measure consistency. Also, any time dietary changes are made or you observe changes in consumption you should recheck urine pH to readjust DCAD level.

C. Feeding Period:

- Recommended minimum feeding period is 21 days prior to parturition. Feeding for a shorter period will not allow for optimum health and performance benefits. Prolonged feeding is not considered to be an issue. But some have indicated that after feeding an anionic diet about 4 weeks or longer you may observe some acclimation in the acid-base balance and an increase in urine pH. During prolonged feeding of anionics bone calcium continues to be used to buffer the effect of the acidifier. Physiologically, cows are geared up to lose 13% of their skeletal calcium in early lactation – pulling out an additional 200 grams of calcium during pre-partum does not seem to impact the bones or mobility in a negative way and cows actively rebuild bone calcium during later lactation.

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D. Blood Calcium:

- We will not learn much from a pre-bleed as pre-partum cows are all going to be within normal limits within 20 days of calving.
- To gauge whether or not an anionic supplement effects blood calcium level take a blood sample within 12 hours of calving and a second 24 hours later. You should see blood calcium increase if the anionic product is working and the cow has received the product for at least 21 days.
- As there will be variation between cows consider sampling a representative number to improve accuracy.
- Analyze for plasma calcium or blood ionized calcium as both are a reliable measure of changes in calcium level in the blood.