

Milk Fever (Clinical Hypocalcemia) is a metabolic disease that has been greatly reduced on most well-managed herds. However, Subclinical Hypocalcemia (SCH) is a silent thief that leads to other diseases and lowers productivity. In North America more than 50% of cows in 2nd and greater lactation suffer from SCH for at least one day during the fresh period. A calcium bolus is the easiest, safest and most efficient way to supplement cows during this critical time.

In the world of calcium boluses, there are many choices for dairy producers. At Agrarian Solutions® we strive to provide product solutions that stand out as best in their category. **Ca3 BioFresh**® has some clear advantages over the many alternatives. How do we compare Calcium boluses and show our value?

Calcium source and speed of dissolving are important factors for getting calcium rapidly into the cow's bloodstream. **Ca3 BioFresh**® features calcium acetate, calcium sulfate and tricalcium phosphate as calcium sources. The calcium acetate rapidly dissolves in the rumen for quick passive absorption in the rumen, the calcium sulfate has a moderate rate of dissolving in the rumen, while the tricalcium phosphate has a slow rate of dissolving for longer term calcium absorption. All three calcium sources are safe for the mouth, esophagus and rumen membranes.

Calcium chloride, a commonly used source in other boluses, can be very caustic when the waxy bolus coating breaks or wears off in the rumen. Calcium carbonate is an inexpensive and commonly used source that has almost no effect on blood calcium levels because of its poor bioavailability.

	Ca3 BIOFRESH®			OTHER BOLUSES	
Calcium Sources	Calcium acetate	Calcium sulfate	Tricalcium phosphate	Calcium chloride	Calcium carbonate
Speed of absorption	quick	moderate	slow	quick	slow
Ruminal bioavailability	high	high	moderate	high	moderate
Caustic to membranes	low	low	low	high	low

Ca3 BioFresh® contains 45.5 grams of Calcium in one bolus, so in most cases you only need one bolus at freshening. High risk cows may need a second bolus 12 hours later. **Ca3 BioFresh**® also contains 50,000 IU of Vitamin D₃ to further enhance the cow's ability to metabolize Calcium and Phosphorus, as well as to support immune function.

In the crowded market for Calcium boluses, Ca3 BioFresh® has clear advantages in Calcium sources and Vitamin D3.

