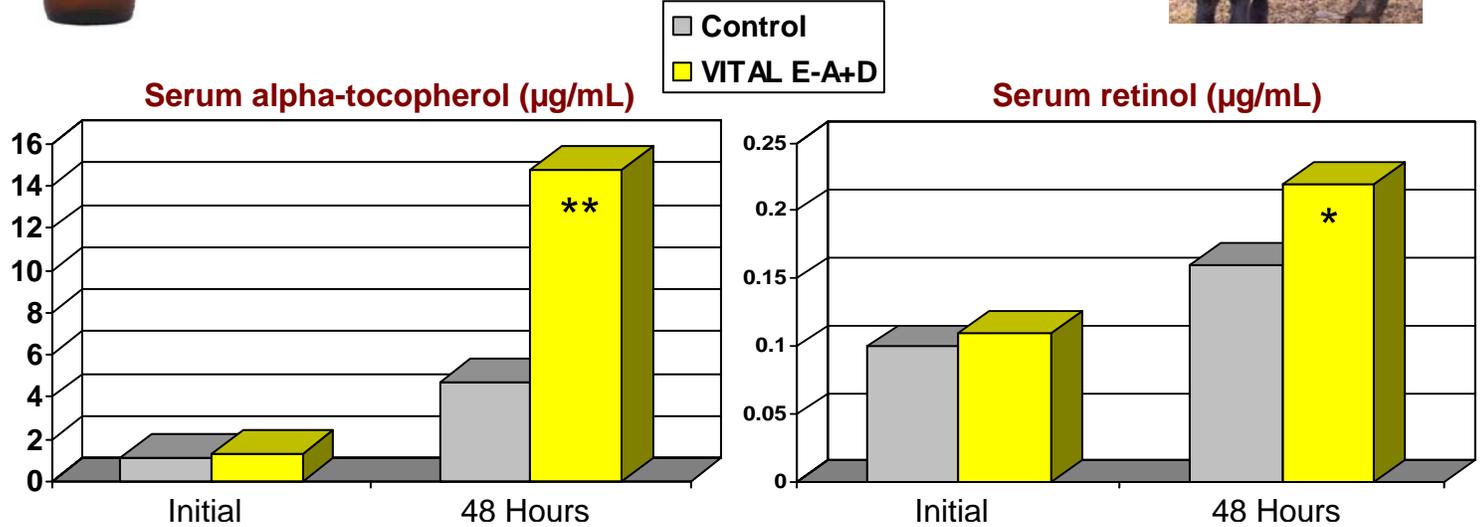




NEWS TO USE



Response of Newborn Beef Calves Injected with 5 mL VITAL E[®]-A+D.



(Each value represents the mean of 10 calves)

Avg. 23-day gain: Control: 32.6 lbs; VITAL E-A+D: 37.6 lbs.

Study reported by Steichen et al, North Dakota State University, Fargo.
2012 J. Anim. Sci. 90 (Suppl 2). p 93.

Results of Study

Response of spring-born calves to a single 5 mL injection of VITAL E-A+D was determined. Calves were bled then injected and serum vitamin A and vitamin E status determined forty-eight hours after the injection. As can be seen above, vitamin E and vitamin A status was dramatically increased (**P<0.01; *P<0.05). Initial serum vitamin A and vitamin E levels were considered deficient. According to Iowa State U. Diagnostic Laboratory, serum vitamin E levels below 3.0 µg/mL and vitamin A levels below .25 µg/mL are considered deficient.

In this study, weight gains were determined 23 days post-injection and the VITAL E-A+D-injected calves had 5 lbs more gain compared to the control calves (P<0.10).

Rationale for use

Calves born to cows during winter, early-spring and drought conditions are more likely to be vitamin E and vitamin A deficient compared to calves born during summer and fall. The reason is that cows grazing lush, green pasture during summer and fall consume much larger quantities of fat-soluble vitamins and pass those vitamins on to the calf through colostrum and milk. During winter months and drought conditions, pregnant cows maintained on roughages consume much less fat-soluble vitamins, due to vitamin losses from hay and other stored roughages, thus producing colostrum and milk that is deficient in fat-soluble vitamins (Paterson, 2005). Mineral supplements may contain vitamin A, but rarely contain vitamin E.

Muscle weakness and diarrhea are classical signs of vitamin deficiencies in newborn calves (Radostits et al., 1992).

Selenium injections do not replace the need for fat-soluble vitamin injections (Maas et al, 2008).

Recommendation

Inject calves born during winter, early-spring and drought conditions with 5 mL VITAL E-A+D at birth.