



**STUART**PRODUCTS<sup>INC</sup>

## **Fatal Non-Responsive Diarrhea in Beef Calves 6 to 8 Weeks of Age**

**Radostits et. al. 1991**

- Sixty head cow-calf herd in Saskatchewan, Canada
- Thirty percent mortality rate in spring-born calves
- Weakness and recumbency, followed by diarrhea and dehydration
- Average plasma tocopherol in 25 untreated calves –  
**1.0 µg/ml**
- Average plasma tocopherol in 2 treated calves –  
**3.82 µg/ml**
- Plasma selenium status was normal - .125 to .252 ppm
- Pathological findings –  
Nutritional muscular dystrophy, elevated CPK

**This case study showed the effects of vitamin E deficiency in spring-born calves. Weakness and diarrhea resulted in 30% mortality. Average plasma alpha-tocopherol was deficient in un-supplemented calves, while supplemented calves had adequate vitamin E status.**

**Lack of fat-soluble vitamin intake during gestation, especially during winter months and drought conditions, resulted in colostrum and milk being deficient in fat-soluble vitamins. The vitamin E status of nursing calves was deficient due to the lack of mammary transfer.**

**Recommend injecting spring-born beef calves with **VITAL E-Newborn**.**