



FOR IMMEDIATE RELEASE

## **Neonatal Calves, Lambs and Pigs Are Often Vitamin E Deficient**

*Using the wrong form of vitamin E risks newborn health, production and producer profits*

Bedford, Texas (March 17, 2015) - Today's husbandry practices combined with seasonal pasture growth patterns can deprive production animals of adequate vitamin E. The natural form of Vitamin E found in green growing grass, as well as legumes, is an essential nutrient for production animals such as dairy cattle, beef cattle, sheep and swine. This powerful antioxidant is particularly important to neonates. Unless the correct form of vitamin E is provided as a supplement to the neonate's daily diet, this important antioxidant becomes deficient resulting in a host of potential health and performance challenges for newborn calves lambs and pigs. The list of potential issues includes diarrhea, weakness, pneumonia, Weak Calf Syndrome and Mulberry Heart Disease in pigs.

### **Not All Vitamin E is Created Equal**

The difference between a natural and a synthetic vitamin E supplement is significant. Knowing the difference is key to optimizing the production animal's vitamin E status and performance, beginning at birth. Whereas stabilized synthetic vitamins provide benefits to mature animals, the same synthetic form of vitamin E may be inappropriate for neonates.

When using vitamin E supplements to optimize neonate performance, bioavailability is a crucial factor. Simply supplementing neonates with vitamin E acetate ester is not enough; the vitamin E supplement should be the same form found in mother's milk. This non-ester form is readily absorbed and utilized by the neonate. Otherwise, the investment in this essential input is wasted.

Nursing and newly-weaned animals are naturally deficient in the esterase enzyme, which is necessary to remove the acetate-ester from the stable -form of vitamin E (alpha-tocopheryl-acetate) before the animal can utilize this form. Due to the deficiency of the esterase enzyme, neonates are unable to utilize the acetate-form of vitamin E and depend upon the colostrum in mother's milk to provide adequate biologically-active vitamin E. Regardless of how much vitamin E acetate is provided in feed rations, the anticipated health and performance benefits for neonates are unrealized when using vitamin E acetate (alpha-tocopheryl-acetate), as proven in university studies.



## **Vitamin E Just Like Mother's Milk**

The form of vitamin E used in Stuart Products<sup>®</sup> Vital E<sup>®</sup> injectable and EMCELLE<sup>®</sup> oral products is different than vitamin E sources used in all other liquid and powder supplements. The form found in Stuart Products oral and injectable products is the same form of vitamin E found in the neonate's mother's colostrum and milk. This form of vitamin E is the alcohol-form (alpha-tocopherol), which is the most biologically-active source of vitamin E and is readily utilized by neonates. The formulation available only from Stuart Products has been proved effective through both university and field studies.

"Stuart Products' vitamin E is unique. Our injectable and oral fat-soluble vitamin formulations provide the sources, forms and levels of fat-soluble vitamins that are critically important to the newborn and reproducing animals," says Robert Stuart, Ph.D., founder and president of Stuart Products. "Production animals require the proper form of vitamin E at the correct life stage. Our products provide demonstrated benefits to neonates and newly-weaned animals giving producers an effective strategy that helps protect their livestock and their investment."

## **Protect Your Investment**

Producers and veterinarians want healthy, productive livestock. They also want to carefully manage input costs. The savvy producer and veterinarian won't invest in a product that does not produce results. To ensure vitamin E supplements are beneficial to their livestock and provide a return on investment, veterinarians and producers should use the correct vitamin forms at the right time, in addition to requesting and carefully reviewing vitamin supplement formulation and bioavailability data. For results of a comparison study, read "[The Importance of Formulation and Bioavailability of Injectable Fat-Soluble Vitamins](#)" in the News to Use section of [www.stuartproducts.com](http://www.stuartproducts.com).

## **About Stuart Products**

Stuart Products, Inc. develops and markets animal nutritional supplements based upon sound scientific research. Stuart Products' goal is to formulate products that have demonstrated benefits in animals. Since 1989, Stuart Products has conducted research at various universities, zoological parks, and independent research facilities on new and existing products for the animal industry. For more information, please visit [www.stuartproducts.com](http://www.stuartproducts.com).

###

**Contact:** Michael Ruhs, Stuart Products, Inc.  
612-708-9294  
[michaelruhs@stuartproducts.com](mailto:michaelruhs@stuartproducts.com)