The Importance of Vitamin E in Your Horses

Vitamin E is found in its highest concentration in fresh green grass. Hay and feed have some Vitamin E but, in feed, it is usually in the synthetic form (less bioavailable) and oxidizes before the horse consumes it. In hay, it is often oxidized prior to consumption as well. Any horses that don't consume a lot of fresh green grass are at risk of a deficiency regardless of the feed they consume.

Vitamin E is important to maintain immune function, cellular functions, reproduction, and neuromuscular function. Although some horses that are deficient may exhibit muscle tenderness, the most common sign of deficiency is generalized weakness. Other signs of a possible deficiency are tracking abnormally, poor muscle development, spookiness, muscle soreness, and neurologic signs.

To prevent a deficiency, supplementation is necessary. Although Vitamin E is a fat-soluble vitamin, there are little to no reports of toxicity. Therefore, supplementation is fairly safe. There are many types of supplements that contain Vitamin E. However, only the natural form of Vitamin E as an RRR-α-Tocopherol isomer is very bioavailable to the horse. This is also known as **D-α-tocopherol.**

To pick a good supplement, make sure that it is the natural form of Vitamin E. A few companies that I recommend are Kentucky Research Products (Elevate), 03 Animal Health, Kentucky Equine Research (Nano-E) and Platinum Performance (Vitamin E). For maintenance supplementation, follow the directions on the back of the supplement. For most horses, we recommend a liquid supplement as it increases blood levels much faster than a powdered supplement. Powdered and pelleted supplements often take around 6 weeks to be effective and, in some cases, aren't absorbed well at all.

It is helpful to have a baseline Vitamin E serum level if you think your horse is deficient prior to starting supplementation because we may need to be more aggressive with the supplementation before lowering the dose to maintenance levels.

Although we have always associated decreased Vitamin E with Selenium deficiencies, Selenium levels in our area are high in the soil. Additionally, repeated testing of mineral levels in our area do not show a deficiency. Therefore supplementation with Selenium is not recommended in the central Texas area.

Call/message us if you have questions!

Piper Norton, DVM, DACVIM
Haley Jatzlau Brown, DVM, cVMA
Texas Equine Medical Associates

512-537-0451