#### WISE FACTS FOR CLIENTS



# Inexpensive vitamin E gel caps are not a good deal for horses owners

We all know that horse keeping is an expensive business. Each of us looks for ways to minimize our costs. Some enterprising horse people have turned to inexpensive human-grade vitamin E gel caps as a cheaper way to supplement vitamin E to their horses. After all, you can't beat 120 caplets, each containing 1,000 IU of natural vitamin E, for less than 30 bucks! But as the old saying goes, buyer beware.

## The type of vitamin E you feed matters to your horse

Decades of research have plainly shown that the type of vitamin E (alpha-tocopherol) fed to horses makes a BIG difference. Because each form of vitamin has a different molecular structure, the names can be confusing. When trying to determine if the source of vitamin E is natural or synthetic, look at the letters that precede the word "alpha" in the name. Synthetic vitamin E is noted as dl-alpha and natural is simply d-alpha. Synthetic vitamin E can be listed as dl-alpha-tocopherol or dl-alpha-tocopheryl (tocopheryl denotes an ester form that is usually a powder). Synthetic vitamin E is not absorbed and utilized well by the horse. So while it is much less expensive to feed, the horse derives little, if any, benefit from it.

The most beneficial type of vitamin E for horses is natural vitamin E. It is listed as d-alpha-tocopherol or d-alpha-to-copheryl. Water-soluble d-alpha-tocopherol is the most readily absorbed, and best utilized, form of vitamin E.

Biopotency of common sources of vitamin E

	BIOPOTENCY
COMMON SOURCES OF VITAMIN E	(IU/MG)
dl-alpha-tocopheryl acetate (synthetic)	1.00
d-alpha-tocopheryl acetate (natural)	1.36
dl-alpha-tocopherol (synthetic)	1.10
d-alpha-tocopherol (natural, Elevate W.S.)	1.49
dl-alpha-tocopheryl acid succinate (synthetic)	0.89
d-alpha-tocopheryl acid succinate (natural)	1.21
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Research has shown that water-soluble vitamin E is capable of crossing the blood-brain barrier, an important function when treating horses with neurological disorders. Water-soluble vitamin E needs to be fed shortly after being removed from its bottle. D-alpha-tocopheryl acetate powder comes in a close second to water-soluble vitamin E in regards to absorption and utilization, with the added benefit of retaining its potency in the typical conditions found in the farm environment. D-alpha-tocopheryl succinate comes in third on the biopotency scale.

### Human-grade vitamin E gel caps are not appropriate as horse supplements

Inexpensive supermarket human-grade vitamin E caplets are marketed as natural vitamin E, but check the label closely; in reality they often contain one or more of the following: synthetic vitamin E or vitamin E complex (a mixture of several forms of vitamin E). As previously mentioned, not all sources of vitamin E are absorbed and utilized equally by horses. Mixing different forms can greatly dilute the amount of natural vitamin E found in a supplement. This means your horse is getting a lot less natural vitamin E than you originally thought.

#### **Buyer beware**

It is perfectly legal for a supplement manufacturer to use a blend of as little as 10% natural vitamin E and 90% synthetic vitamin E and still label the product "natural vitamin E." By using the much cheaper synthetic vitamin E, manufacturers can greatly reduce their cost and your price. In these circumstances, since horses don't utilize synthetic vitamin E very well, it becomes hard to tell exactly what your horse is getting!

When it comes to vitamins, potency matters. Less expensive products typically contain vitamins with lower potency levels. A vitamin's potency does not have to be listed on a label. While it might seem like you are getting a good deal with inexpensive gel caps, your horse is actually getting much less than you think he is.

As a consumer it is important to understand that government standards require that vitamin manufacturers only need to adhere to minimal government guidelines, not requirements. How a product is stored (light, temperature, moisture, etc.), inventory rotation, and even product coating can vary greatly from brand to brand, all of which affect the potency and quality of a vitamin. Government standards do not require manufacturers to conduct shelflife testing, which determines how the product's potency is affected over time.

### Why choose Elevate<sup>®</sup> natural vitamin E instead of inexpensive supermarket gel caps?

Elevate products are made with pure natural vitamin E in the form of d-alpha-tocopherol or tocopheryl. There are no vitamin E complexes or synthetic vitamin E in any of the Elevate products. Elevate is a highly bioavailable



source of vitamin E manufactured for use in horses. Extensive research and testing has been conducted on the Elevate products to determine bioavailability, proper packaging and storage requirements, as well as shelf-life expectancy, which ensures the highest level of potency throughout the life of the product when stored and used according to the manufacturer's recommendations.



Elevate<sup>®</sup> W.S. liquid (water-soluble d-alpha-tocopherol) is manufactured and warehoused under optimal conditions to ensure its high level of biopotency is not compromised. Special packaging protects the biopotency of Elevate W.S. until it is used. When stored properly and fed soon after being removed from the bottle, its superior biopotency remains intact. Elevate W.S. is the leading choice of veterinarians when treating neurological disorders in horses.

The vitamin E in Elevate<sup>®</sup> Maintenance Powder (d-alpha-tocopheryl acetate) is also highly bioavailable. It was developed to withstand the conditions most often found in a farm/barn environment. It can be stored under variable environmental conditions and safely be added to a meal well in advance of feeding without experiencing any losses in quality and potency. This makes it a convenient and cost-effective way to provide daily supplementation of a high-quality natural vitamin E to horses.

So, while that \$20 jar of vitamin E caplets you picked up at Walmart might seem like a good deal, chances are, when it comes to quality, you are getting exactly what you paid for and your horse is not getting near the amount of natural vitamin E he requires.



