

READ THE LABEL!
Understanding Nutritional Supplements

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A myriad of nutritional supplements are available for the horse. The term nutritional supplement encompasses a broad range of products, including vitamins, minerals, herbs and nutraceuticals. These supplements are used for many purposes such as to boost overall health and energy; to provide immune system support; to reduce the risks of illness and age-related conditions; to improve performance in athletic activities and to support the healing process during illness and disease.

Unfortunately many products that have come on the market are being pushed with little scientific basis for the assertions made on their labels. The reason is that generating this data is both costly and time-consuming to the manufacturer. Unlike FDA-approved medications, there is no requirement that these products provide efficacy and safety data prior to marketing the product. Instead some companies rely on word of mouth and testimonials to help market their product. Because scientific information and clinical trial data is not often available supplements are being administered without information on the basic properties and functions of these substances. Without this information questions arise such as what is the mechanism of action of the supplement, is the supplement being appropriately absorbed and utilized, is it safe for my horse and are there any interactions with other medications? Some manufacturers will provide efficacy and safety information about the product in other species. Appropriate studies on efficacy and safety should answer questions about absorption, tissue distribution, metabolism and excretion of the supplement in the horse. A supplement labeled for use in multiple species is misleading because bioavailability, efficacy and safety are not the same between species.

As supplementation becomes more widespread, the potential for adverse interactions with prescribed medications exists. Supplements may decrease the absorption of other drugs, inhibit or induce drug clearance or exacerbate pharmacologic effects of other drugs. Unfortunately research on these potential interactions is lagging behind supplemental usage. Usage of multiple supplements can also result in problems. Supplements are administered based on a key ingredient without any attention paid to the other ingredients listed on the label. Oftentimes there is overlap of some ingredients thus administration of multiple supplements may result in over-supplementation and potential side-effects.

In an attempt to standardize manufacturing of animal supplements the National Animal Supplement Council (NASC) was created. It is a non-profit organization dedicated to improving and standardizing the animal health supplement industry. Members must adhere to NASC's specific standards involving quality control and labeling. Additionally, members are required to investigate and enter reports of adverse events related to their products on a monthly basis. The information on adverse events is only available to NASC members but it is made available to the FDA. One flaw is that NASC does not require companies to perform efficacy studies on

products but overall this organization is an attempt to standardize the manufacturing of supplements (for more information visit www.nasc.cc).

Determining which supplements have been appropriately validated in horses and are safe can be challenging. Choose supplements from a manufacturer that can provide a scientific basis for use of the supplement in horses. A reputable company should be able to validate the use of their product and provide efficacy and safety information. Enlist your veterinarian in choosing the right supplement and pay special attention to all ingredients on the label to prevent over-supplementation. Prior to administering prescription medications, ask your veterinarian about the potential for drug interactions.