

Equine Supplements

Nutraceuticals are thought to have some beneficial effects for horses, but more studies are necessary

What are Nutritional Supplements?

Nutritional supplements, also referred to as nutraceuticals or dietary supplements, are defined as products taken by mouth that contain one or more dietary ingredients intended to supplement the diet. These dietary ingredients might include vitamins, minerals, herbs or other botanical products, amino acids (the building blocks for proteins), and substances such as enzymes, organ tissues, glandulars, metabolites, extracts, or concentrates. Nutritional supplements are formulated as tablets, capsules, softgels, gelcaps, liquids, powders, or medicated feeds (e.g., pellets).

Examples of nutritional supplements include vitamins, electrolytes, mineral blocks, and products marketed for joints, hoofs, and skin, among a multitude of others.

Are Nutritional Supplements Legal?

Yes. The American Association of Equine Practitioners (AAEP) endorses the American Veterinary Medical Association's (AVMA) 2002 guidelines on the use of complementary or alternative medicine, including the use of nutraceuticals. Specifically, the therapeutic use of micronutrients, macronutrients, and other nutritional supplements is permitted; however, the potential risks and benefits should be discussed within the bounds of a veterinary/client/patient relationship. The AVMA clearly encourages continued research and education on the use of veterinary nutritional supplements/nutraceuticals.

Nutritional supplements are not pharmaceutical drugs, are not manufactured like pharmaceutical drugs, and have not undergone testing to demonstrate either efficacy or safety. As such, the United States Food and Drug Administration (FDA) has ruled that nutritional supplements are not permitted to claim that they can be used to diagnose, prevent, mitigate, treat, or cure a disease. Products that make these claims are considered illegal drugs by the FDA.



The potential risks and benefits of nutraceuticals should be discussed with your veterinarian.

Commercially Available Supplements

Nutritional supplements have become exceedingly popular over the past few decades for a combination of reasons. Nutritional supplements are easy to administer, economical, and do not require a prescription. Some veterinarians recommend nutritional supplements along with or in lieu of prescription drugs or in combination with pharmaceutical agents.

Nutritional supplements can be purchased directly from your veterinarian, from tack shops, or via the internet. Nutritional supplements are marketed (not necessarily proven) for the management of a wide range of medical conditions involving virtually every body system of the horse, including anhidrosis, behavior problems (e.g., for calming, wood chewing), hoof health, immune system, joint health, metabolic issues, muscular and other musculoskeletal conditions (including tendon and ligament problems), skin and coat, gastric ulcers, and weight gain.

How Can Nutritional Supplements Benefit Horses?

Due to the paucity of basic scientific research in the field of veterinary nutritional supplementation, the exact mechanism(s) of action of many of these products either remains unclear or has been extrapolated from research performed in other species. Some ways that nutritional supplements might exert beneficial action are by providing precursor molecules that are lacking or missing from the diet, by exerting an anti-inflammatory effect, or via antioxidant properties.

Since the majority of products have not been tested clinically, it is almost impossible to describe exactly how these products are beneficial for horses. Therefore it is important to include your veterinarian in decisions to supplement horses, especially horses that might have physical problems. Some owners, trainers, and veterinarians are convinced of the merits of nutritional supplements, and there has been continued growth of the nutritional supplement industry over the past few decades.

Oversight in the Supplement Industry

Despite the potential benefits associated with nutritional supplements, there are some concerns with the nutritional supplement industry that could negatively impact the quality and safety of a product that consumers should be aware of. Because the industry is essentially unregulated by federal oversight, each independent manufacturer is responsible for ensuring the safety of the product. As a result, a variety of poor-quality supplements exists. This includes products that do not contain the type or amount of ingredient listed on the label, have sub-therapeutic (low) dosages, or are potentially contaminated with harmful chemicals (e.g., pesticides and heavy metals) or ingredients included in other types of supplements manufactured

in the same facility due to inadequate cleaning of equipment.

Some supplement manufacturers are members of a private group called the National Animal Supplement Council (NASC). NASC's mission is to work constructively and cooperatively with state and federal regulatory agencies to ensure that animal owners maintain continued access to products while creating systems to ensure quality and risk management. This is a self-regulated group.

In 2003 NASC established an adverse event reporting system, and it also works ensure the animal supplement industry is conducting itself responsibly:

- Established current good manufacturing practices (cGMPs) in 2004;
- Established product labeling guidelines;
- Established a scientific advisory committee, providing independent oversight for ingredients;
- This committee submitted risk stratification recommendations to FDA-CVM for all ingredients in our members' products. Over 850 ingredients were reviewed; and

- Established an independent quality audit program to verify implementation by member companies.

Too Much Supplementation

One final concern regarding the use of nutritional supplements in horses is oversupplementation, which results from providing too much of one or more nutrients, vitamins, or minerals in the diet. All nutrients must be consumed in balance. Thus, oversupplementing with one or more nutrients can be detrimental to the horse. Since many horses, such as athletic or senior horses, are often offered more than one nutritional supplement in the form of a vitamin, electrolyte, salt and mineral block, or joint supplement per day, these horses are at risk for oversupplementation. Providing unnecessary nutrients in the form of nutritional supplements is not economical. Owners are encouraged to determine the total amount of each supplement that is administered on a daily basis to determine if a horse is receiving more than the recommended daily allowance as outlined in the 2007 edition of the National Research Council's (NRC) book,

FAST FACTS

- **Nutritional supplements**, nutraceuticals, and dietary supplements are synonymous terms used to describe products containing dietary ingredients intended to supplement the diet.
- **Supplements** can include vitamins, minerals, herbs or other botanical products, amino acids, enzymes, organ tissues, glandulars, metabolites, extracts, or concentrates.
- **Nutritional supplements** are available through veterinarians, tack shops, and the Internet.
- Products are available for the management of numerous disease processes involving virtually every body system.
- **Poor-quality supplements** are widely available, and consumers should be aware that not all products are guaranteed to be either safe or efficacious.

"Nutrient Requirements of Horses."

While there are many people—horse owners and industry professionals—who use nutraceuticals of various kinds and believe in them, there is still much research that needs to be done to prove the merits of some of these products. 🐾

This is my horse™

Thanks to dedication, a lot of hard work and Platinum Performance, we've turned Carlsson into a one-of-a-kind horse and truly great champion.

Will Simpson

WILL SIMPSON & CARLSSON VOM DACH
Olympic Gold Medalist
Platinum Performance Client since 1996

← *This is my Platinum*

Will fed Carlsson vom Dach Platinum Performance™ Equine for overall health, Myo-Vet™ for aid with muscle recovery, and Vitamin E for protection from oxidative stress.

PLATINUM
PERFORMANCE®

www.ThisIsMyPlatinum.com

1-800-553-2400

