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Two Things You Should Know About Equine Supplements

By: Michael Thomassen, DVM

Many different supplements are available for horses. If you perform an online search, you will find literally hundreds of supplements from both recognized and unrecognized manufacturers. Which one is right for your horse? Which one is the best return on investment? I think that there are two important pieces of information to consider before buying a supplement for your horse.

Oral supplements are nutraceuticals. What does that term mean? Nutraceutical is a term that combines the words nutrition and pharmaceutical. The definition of nutraceutical is a nutrient with drug-like properties but not legally recognized as a therapeutic agent. In other words, it is a supplement that is implied to prevent or treat disease. One of the biggest concerns with nutraceuticals is that they do not have any USDA oversight. The product claim is made by the manufacturer and proof of efficacy is not required. This is definitely a concern.

Another concern is that the bioavailability of nutraceuticals is unknown. Bioavailability is the degree to which a substance becomes available to the target tissue after administration. A study published in 2005 questioned the absorption of glucosamine given orally through a nasogastric tube. By administering glucosamine through a tube, none of the product was lost out of the horse's mouth so the entire product was ingested. Then synovial (joint) fluid was analyzed to determine the concentration in joints. It was concluded that the levels of glucosamine obtained in synovial fluid following nasogastric administration with clinically recommended doses are lower than the levels that have been studied to affect joint cells. It is important to note that this study was only examining glucosamine.

Many people that take daily joint supplements report an improvement in range of motion and decreased joint pain. I do think that supplements can be beneficial. Many horses will be placed on joint supplements to treat lameness without diagnosing the source of the pain. It is always best to perform an examination and identify the cause of lameness. Once this occurs, targeted therapy can be initiated. Caution should be used when a product claims to prevent lameness. If lameness could be prevented by using a specific product, then all of our horses would be given a supplement. Proper conditioning and exercise routines to help

get a horse in shape is extremely important. In an ideal world, all supplements would be required to prove efficacy. Maybe someday they will.

Sources consulted

1. Saunders Comprehensive Veterinary Dictionary, 2nd edition. Page 130 and 794.
2. McIlwraith, Wayne C. Management of Joint Disease in the Sport Horse. Proceedings of the 2010 Kentucky Equine Research Nutrition Conference. Available: [http:// www.equisan.com/images/pdf/manajoint.pdf](http://www.equisan.com/images/pdf/manajoint.pdf).