

Marine sources of long chain omega-3 fatty acids providing eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) supplementation have been associated with positive effects on human immune, reproductive, and cardiovascular systems. It is also thought that these fatty acids may play a role in alleviating symptoms associated with autoimmune disorders, osteoporosis, diabetes, and hypertension.

The Food and Drug Administration (FDA) recently announced the availability of a qualified health claim for reduced risk of coronary heart disease on conventional foods that contain EPA and DHA omega-3 fatty acids.

What's good for your baby, may be good for your stallion.

Human breast milk is rich in many nutrients, especially high levels of DHA. Recent studies have linked maternal dietary intake of DHA with increased infant psychomotor development in toddlers (Jensen et al., 2001) and enhanced neural and visual development (Birch et al., 2000) in newborns.

Recognizing the significance of this, Martek BioSciences began research on adding DHA to infant formulas. In 2001, the FDA recognized Martek's DHA (a similar source of DHA to that which is found in Magnitude) as having GRAS (**Generally Regarded As Safe**) status for use in infant formulas. Since then, Mead Johnson, Wal-Mart, Nestle USA, and others have routinely added DHA to their infant formulations. DHA is now added to infant formulas in over 60 countries. (Ref: www.martek.com)

DHA safety in animals.

Magnitude provides an unique proprietary blend of marine sourced long chain omega-3 fatty acids, in particular, EPA (eicosapentaenoic acid, 20:5 n-3) and DHA (docosahexaenoic acid, 22:6 n-3), plus complementary antioxidants and vitamins.

Magnitude's source of fatty acids is similar to those often used in human foods and nutraceuticals, and several studies have confirmed the safety of DHA in both humans and other mammals (Kyle et al., 1998.)

Numerous studies have tested Magnitude or formulations of marine source fatty acids similar in composition to Magnitude. The table shown on reverse lists university studies in which Magnitude, or similar combinations of EPA and DHA, were safely fed to horses. Researchers monitored animals closely, and the animals used in these trials were of all ages and sexes, including pregnant mares and foals. Similar to documented research in humans, a few of the research trials illustrated that feeding DHA to stallions may enhance semen quality. (Brinkso et al., 2005; Ams et al., 2005; Squires et al., 2005)

Magnitude includes a combination of algal DHA and highly refined and protected fish oils to achieve the most effective combination and ratios of EPA and DHA.

These marine sources are classified as having GRAS (**Generally Regarded As Safe**) status by the FDA. The patented, protected formulation of marine oils in Magnitude eliminates the concerns of oxidation and off flavors frequently found with simple fish oil products. In addition, the stability of active ingredients is assured with Magnitude.

By providing DHA, Magnitude also provides a nutrient that is not found in equine wintering diets. Feeding Magnitude assures the stallion's condition for vigorous spring activity after a winter of reduced nutrition and activity. Research has shown that DHA is not a normal component of wintering diets for horses, and it is important that their rations be supplemented several months prior to the period when the horses are expected to perform in the spring.

In its first year of introduction, Magnitude™ was fed at some of the leading breeding facilities in the United States. In addition to a nutritional supply of DHA, those stallions receiving Magnitude were reported to look better and feel better.

Specific comments from customers include:

"Delighted with the product and have recommended it to other breeders." - J. Werner, Saddlebred Breeder

"I use it on all my athletic stallions; they are more comfortable and spermogram is maintained." - Dr. L. Metcalf, Honalee Veterinary Clinic

When fed to actively breeding stallions, research indicates that DHA-supplemented stallions experienced marked improvements in conditioning potential. In addition, feeding Magnitude™ in both commercial and research settings illustrates that the product appears to be a safe, palatable, and stable source of DHA.



Get more bang for your buck...

Ask your veterinarian for more information or contact Bioniche Animal Health at 1-888-549-4503.

Magnitude™ - Table Summary

Table 1. Number of animals in Magnitude™-related research

University	# of animals in trial	Animal Category
Colorado State University	18	Mixed
Colorado State University	10	Breeding Stallions
Kansas State University	36	Mares and Foals
Kansas State University	40	Mares and Foals
Southern Illinois University	16	Mixed
Southern Illinois University	27	Gestating Mares
Michigan State University	18	Mixed
University of Florida	72	Mares and foals
University of Florida	18	Yearlings
University of Florida	18	Yearlings
University of Arizona	6	Stallions
University of Arizona	6	Stallions
Texas A&M	8	Stallions
TOTAL	293	

Table 2. Estimation of numbers of actively breeding stallions fed Magnitude™ during the 2006 breeding season. (Ref. Bioniche Animal Health, 2006).

Breed	Breeding Stallions
Quarter Horse	124
Thoroughbred	110
Standardbred	25
Other/Mixed Breed	84
Unknown	73
Total	416



For more information visit
www.MagnitudeDHA.com

Reference list available on-line.