Better Breeding Through the Science of Feeding

Magnitude™

Unleash your stallion's breeding potential

He Has Attitude, Fortitude and Now ... Magnitude™

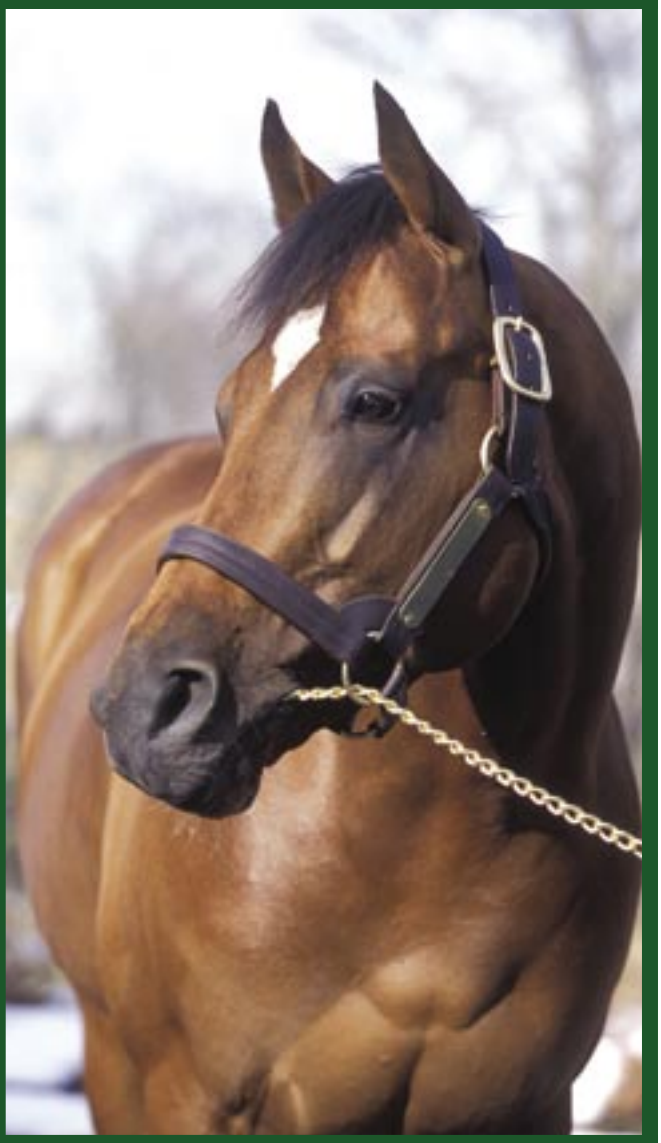
He has the conformation, the history, the bloodlines and the success. He's the stallion of your reputation and your bottom line. He's a stallion of Magnitude™.

Stallions making the transition from performer to producer require a new set of skills. While training can improve his mind and his muscles, it won't change his reproductive capability.

But today, there's a new way to improve his performance as a sire. Progressive, successful breeders can count on new, research-based Magnitude from United BioNutrition and Bioniche Animal Health to maximize the potential of their breeding stallions.

"Our studies demonstrate that feeding DHA changes the sperm plasma membrane and improves the quality of stallion sperm."

Edward L. Squires, Ph.D.
Professor, Animal Reproduction & Biotechnology Laboratory
Colorado State University



The Magnitude of Success

The importance of omega fatty acids in equine diets is nothing new. However, the nutrition experts at United BioNutrition have worked with leading universities to identify a specific balance of marine-based omega-3 fatty acids (specifically, docosahexaenoic acid or DHA) that significantly improves a stallion's reproductive ability.

Today's equine diets don't contain a sufficient supply of DHA or a proper ratio of omega-3 to omega-6 fatty acids. The result is a diet that hinders stallions from achieving their full potential in both quality and quantity of semen.

Studies show that stallions fed diets supplemented with Magnitude's precise blend of long-chain polyunsaturated omega-3 fatty acids (including DHA), antioxidants and vitamins experienced marked improvement in reproductive potential:

- a 78 percent increase in sperm concentration[1]
- a 46 percent increase in daily sperm output[2]
- a significant increase in sperm motility, even in semen cooled for 48 hours[1] (Figure 1)
- an increase in daily output of progressively motile sperm[3,4] (Figure 2)
- an increase in the percentage of morphologically normal sperm in fresh semen[5] (Figure 3)

Magnitude gives you the potential of an ncreased supply of semen that's also more highly concentrated and viable in storage. It adds up to impressive results – especially for stallions with poor reproductive traits[1].

Not Your Ordinary Omega

DHA is the key. The membranes of spermatozoa are composed primarily of DHA. And scientific studies verify that the marine-based omega-3 fatty acids in Magnitude improve the supply of DHA in stallions. This increases both the number of normal spermatozoa and their concentration in semen.

Simply stated, DHA concentrations are crucial to proper sperm cell function. So when it comes to enhancing reproductive potential, all omegas are not created equal:

- most feeds and supplements are high in omega-6 fatty acids that do nothing to improve reproductive ability
- plant-based omega supplements, such as flax, do not supply DHA
- fish oil supplements present challenges with odor, palatability and stability in storage, and they may not have the proper ratio of fatty acids to increase a stallion's supply of DHA

That's where Magnitude stands above the rest. Its balanced blend of fatty acids – not found in any other omega-3 product – increases your stallion's DHA to foster a more productive, prolific and profitable sire.

Feed Your Stallion's ROI

Consider the potential impact of just one extra foal per year from your stallion. What's that worth? The income from one foal will more than recoup the cost of a seven-month regimen of Magnitude,
thereby increasing your stallion's return on investment.

It's safe and easy to use, too. Magnitude's source of DHA is similar to those often used in human foods and nutriceuticals. In fact, safety studies[6] and research[7] suggest that DHA oils are safe and do not cause toxicity – even at 100 times the daily recommended human intake. This gives you an added level of assurance in what you're putting in his feed.

Simply feed your stallion Magnitude flavor-coated pellets at the rate of three-fourths of a pound per day for 60 days prior to breeding and throughout the breeding season.

Contact your veterinarian or Bioniche Animal Health to improve the return on your breeding operation with an increased supply of quality, concentrated and viable semen … make yours a stallion of Magnitude™.

"The abilitiy to change the lipid composition of the sperm membrane by feeding long-chain PUFA opens up tremendous possibilities of improving the survival of stallion sperm after cooling or freezing."

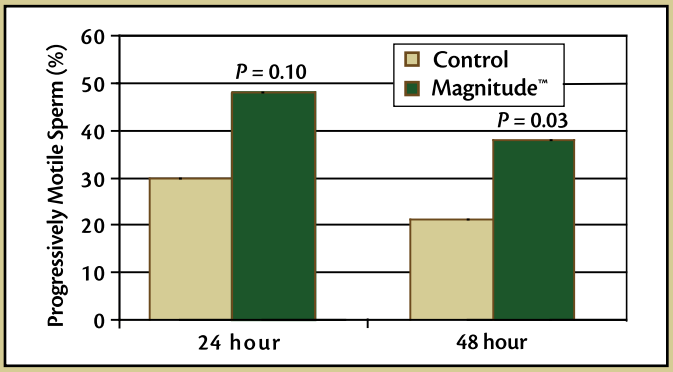
Edward L. Squires, Ph.D.
Professor, Animal Reproduction & Biotechnology Laboratory
Colorado State University

Nutritional Considerations

Magnitude enhances your stallion's diet with an important blend of antioxidants and vitamins, particularly vitamin E. It has a negligible impact on energy, too. Pound for pound, Magnitude has a caloric value similar to corn and is lower in carbohydrates.

When feeding Magnitude, be sure to consider other fat sources used in the complete diet. Adding corn oil or other vegetable fat sources high in omega-6 fatty acids may interfere with Magnitude's ability to maintain the omega-3 to omega-6 ratios associated with reproductive benefits in stallions.

FIGURE 1:
A Notable Increase in Viable Semen for Problem Stallions

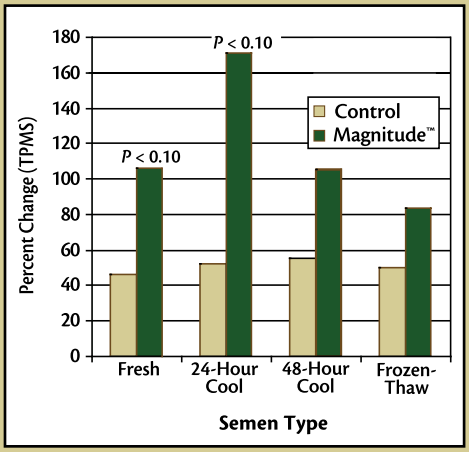


This illustrates the change in progressively motile sperm after feeding Magnitude™ to stallions with less than 40 percent progressively motile sperm. Magnitude promotes an increased supply of viable semen after 24 and 48 hours of cooling and storage[1]. ***Texas A&M University***

"Optimizing levels of DHA and its precursors by altering the diet of marginally fertile stallions may improve their semen quality sufficiently enough to make them commercially viable for cooling or freezing."

Steven P. Brinsko, DVM, MS, DACT

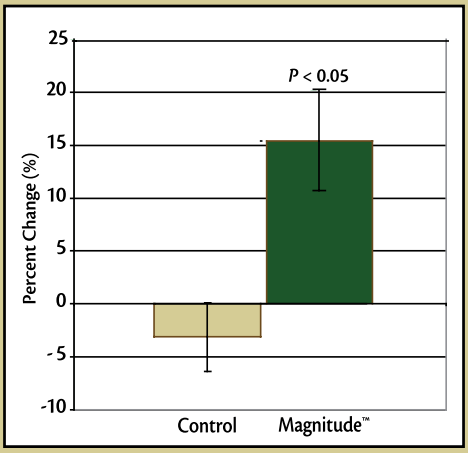
FIGURE 2:
More Progressively Motile Sperm per Ejaculate



With Magnitude, stallions experienced percentage increases in the quantity of total progressively motile sperm (TPMS) produced in fresh, cooled and frozen-thawed semen[3,4].

Colorado State University

FIGURE 3:
More Viable Sperm in Fresh Semen



Magnitude produces a significant percentage increase in morphologically normal spermatozoa in fresh semen[5].

University of Arizona

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