Jengune BRINGING SCIENCE TO YOUR FEED BIN

Equine Clinical Nutrition

Magnesium PLUS Vitamins B1,6 & E

DR JENNIFER STEWART'S

Ezypade Backborn Supplement for All Horses For MUSCLES & MIND For Administration in Feed

1& 2.5kg NETT FOR ANIMAL USE ONLY

EZYMAG+[®] SUPPLEMENT FOR MUSCLES & MIND FOR ALL HORSES

Magnesium has a role in the management or prevention of several equine clinical conditions, including behavioural problems (nervousness & excitability), Cushings disease (PPID), equine metabolic syndrome (EMS), insulin resistance, laminitis, muscle problems & osteochondrosis. Magnesium requirements are also increased in ageing horses; on lush, rapidly growing pasture; during exercise & training; in lactating & cycling mares, & with travel & transport.

Behaviour: The combination of magnesium & thiamine has been shown to be equal to acepromazine in reducing excitability, reactivity & heart rate during stressful events.

Muscles: In show jumpers, 3-day event, dressage & 4-in-hand horses, Olympic veterinarians reported that magnesium supplementation reduced skin sensitivity, 'hot' attitudes, unexplained hindleg lameness (muscular in origin), tying-up, irritability, weakness, stiffness & elevated muscle enzymes (AST & CK). Some mares & fillies are more prone to twitchiness, flighty behaviour, muscle pain & tying up when in-season & this has been associated with an hormone-induced fall in blood magnesium levels. Muscle pain, nervousness & tying-up can all occur in horses with a subclinical magnesium deficiency, & any horse that ties-up can benefit from extra magnesium in their diet.

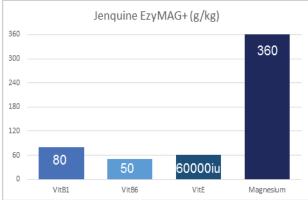
Bone: Young horses, especially those growing rapidly, are at risk of developmental bone disorders. Known as DOD, this syndrome mostly occurs with fast, rapid growth. Recent research in Europe looked at the influence of Mg supplementation on the incidence of osteochondrosis (OC). They concluded that supplements containing magnesium reduced OC incidence.

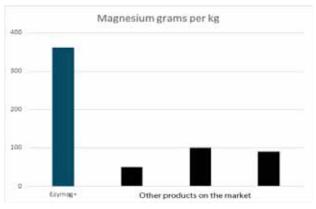
Insulin-resistance & EMS: There are reports of magnesium supplementation improving insulin resistance, reducing & softening crest neck fat & lowering EMS-laminitis risk. It is advisable to ensure that diets for insulin-resistant horses & ponies at least meet the maintenance requirements & many veterinarians recommend 10g of magnesium per day.

Immunity: There are important interactions between magnesium, Vitamin E & the immune system, especially in pregnant mares where they increase the quality of the colostrum, & in older horses, where they repair some of the age-related changes in the immune system & increase killing capacity of white blood cells.

EzyMAG+[®] is intended to address subclinical deficiencies, the diagnosis of which is often difficult & requires urine clearance tests— but the clinical signs are recognisable. As with any nutritional deficiency, there are individual variations but most equine diets are deficient in magnesium & most horses benefit from supplementation.

NOTE: **EzyMAG+**[®] does not include tryptophan. Although studies in rats & mice show a reduction in anxiety, current research in horses shows that tryptophan can cause stimulation & excitement 2–4 hours after dosing; does not change reactive behaviour & that long-term use may have detrimental effects (reduced endurance capacity & acute haemolytic anaemia).





FEEDING RATES[†] (scoop contains 30g) Weanlings, yearlings, ponies, horses, mature horses, pregnant & lactating mares

Improved pasture/lucerne: 30g/day Other diets: 15g-60g/day according to body weight *Feeding rates may vary according to the season & veterinary advice.

ANALYSIS (per kg)

Magnesium	360g
Vitamin E	60000iu
Thiamine hydrochloride (B1)	80g
Pyridoxine hydrochloride (B6)	50g
Sodium	60g
Chloride	63g
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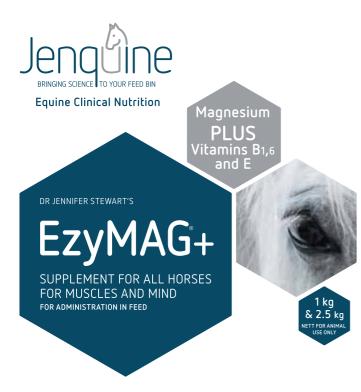
Jenquine

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FORMULATED & MADE IN AUSTRALIA by Dr Jennifer Stewart BVSc. BSc. PhD. Equine Vet

by Dr Jennifer Stewart BVSc, BSc, PhD, Equine Veterinarian & Consultant Nutritionist For more information email info@jenquine.com, call 0419 121 314 or www.jenquine.com



Most equine diets are unbalanced in magnesium – and vitamins B₁, B₆ and E deficiencies are common in pregnant and lactating mares, older horses and ponies, young horses, during exercise and in horses without free access to good quality pasture.

Magnesium is especially important for brain, nerve and muscle function? Requirements are increased in cycling mares and fillies, with transport, insulin resistance (and laminitis/founder) Cushing's disease (PPID), equine metabolic syndrome, muscle problems (including twitching and tying-up), nervousness and excitability.

Vitamin E - benefits pregnant, performance and older horses; colostrum quality and the immune system - which declines with age. Supplementary vitamin E at 600 iu/day repairs some of these changes, increases the response to vaccinations, enhances the immune system and resistance to disease and infection.²

Serum vitamin E often decreases in pregnant mares. Supplementation with 200-400iu of vitamin E increases the immune quality of the colostrum and foal IgG levels.³ Vitamin E needs increase with exercise and for horses on oil. Horses in very intense training and those prone to recurrent muscle problems also benefit from higher vitamin E intake.⁴

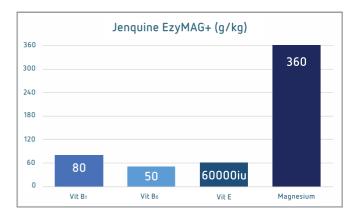
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RECOMMENDED BY VETERINARIANS - APVMA #: exempt

B Vitamins - As a guideline, horses on less than 2% of their bodyweight in roughage (chaff, hay, pasture) or more than 2kg of concentrate per day, require thiamine B₁ and pyridoxine B₆ supplementation. Exercise also doubles requirements?

EzyMAG+ provides magnesium, vitamins E, B₁ and B₆ in balanced ratios – meeting clinically recommended levels, supporting optimum muscle, nervous system and immune function and protecting against dietary deficiencies.



At the recommended intake of 30g/day (according to body weight, reproductive status, age and work level), EzyMAG+ provides 11g of magnesium, PLUS supplementary vitamins B₁, B₆ PLUS 1800iu of vitamin E - all in an easy 30g scoop. The magnesium in EzyMAG+ has one of the finest particle sizes and is of the highest quality.



For more information please contact us by phone on 02 4365 0806 or email info@jenquine.com

www.jenquine.com

 Magnesium Disorders in Horses (2011) Vet Clin Nth Am Eq Pract 2. The Influence of vitamin E on immune function and response to vaccination in older horses (2014) J An Sci 3. Administration of RRR-a-tocopherol to pregnant mares stimulates maternal IgG and IgM production in colostrum and enhances vitamin E and IgM status in foals (2011) J An Physiol An Nutr 4. Vitamins (2014) Eq Applied & Clin Nutr 5. Thiamin supplementation of exercising horses (1981) Proc Eq Nutri & Physiol Soc