

NEW! Dynamite® Easy Balance™ For Metabolic Balance!



Cushing's disease and Laminitis are usually classified together as Equine Metabolic Syndrome (EMS). They originate from the same fundamental metabolic issues, namely pituitary imbalance which causes the body to increase secretion of ACTH and then to overproduce cortisone. Insulin Resistance (IR) also fits this category of EMS. In fact, many horses that show pre-Cushing's symptoms but have normal ACTH levels are actually Insulin Resistant. These horses have high insulin levels as a result of their muscles' inability to absorb glucose for fuel, which causes the body to produce more insulin in an effort to use the glucose. Insulin Resistant horses are analogous to human Type 2 Diabetics.

Directions: Feed 1 to 3 ounces daily, or as needed, with **Dynamite** for horses or **TNT™**, and a low glycemic diet. For optimum results, add **OxE Mega™** for antioxidants and omega-3's, and **H.E.S.™** pellets if weight loss is a consideration.

Ingredients: Magnesium Amino Acid Chelate, Thiamine Mononitrate, Riboflavin Supplement, Lysine, L-Tryptophan, Montmorillonite Clay, Organic Cinnamon, and Chromium Nicotinate.



General care of EMS horses

General care of EMS horses includes a low-carb, high fiber diet, with no grain, and a low NSC (low sugar/starch) hay. High quality protein, anti-oxidants and fatty acids are needed such as those found in **Dynamite H.E.S.** pellets and **OxE Mega**. We also recommend **Dynamite** Vitamin Mineral Supplement or **TNT** for available minerals, amino acids and vitamins that fulfill the horse's basic needs. Dramatically increased levels of two particular minerals, Magnesium and Chromium, have also been found to be invaluable in dealing with EMS.

The Importance of Magnesium

Magnesium levels in particular should be increased well over the needs of the average horse. Magnesium relaxes the blood vessels for better circulation,

especially important in the small blood vessels of the feet. In humans, magnesium has also been shown to lower C-reactive protein (CRP) which is a sign of inflammation in the body. Blood sugar stabilization and thyroid support are two other functions for which magnesium is invaluable. Magnesium deficiencies exhibit as nervousness, muscular tightness, irritability, excitability and poor memory retention. Most of the U.S. is deficient in magnesium in the soil, especially on both coasts and anywhere there is clay soil. The high stress lifestyle of many horses leads to an increased need for magnesium, and mares are notoriously deficient in magnesium due to estrogen levels. Since it is impossible to overdose magnesium and it is non-toxic, it makes sense to supplement generously, as the deficiency may even be a predisposing factor to the development of EMS.

Chromium is Critical

Chromium helps the body to use insulin more effectively so that insulin and blood sugar levels do not rise abnormally. Anecdotally, we have seen reductions in neck crestiness and obesity with the addition of 1,000 mcg up to 3,000 mcg (1 to 3 mg) of chromium daily to the diet of an EMS horse, or even more if necessary. Chromium has the unique ability to balance blood glucose as it lowers high blood glucose in diabetics and corrects low blood glucose in hypoglycemics. Low blood sugar is a leading cause of anxiety and nervousness, so chromium has stabilizing effects on the emotions as well. Building lean body mass and preventing the breakdown of muscle tissue in human athletes is another ability of chromium and this appears to translate into the maintenance of EMS horses as well. Dynamite **Easy Balance** contains just under 1 mg (1000 mcg) of niacin-bound chromium per oz. This is the most expensive source, and the only source of chromium that is definitively proven in research to balance blood sugar levels.

Cinnamon

Cinnamon has been discovered to be valuable in the treatment of Type 2 Diabetics and appears to have the ability to balance blood sugar. Dynamite Easy Balance contains pure, fresh ground, organic cinnamon for palatability as well as for blood sugar balance.

Thiamine plays a vital role in carbohydrate metabolism. A recent study at Warwick Medical School in the UK, as quoted in a Health Sciences Institute e-alert, states that researchers “have discovered that deficiency of thiamine - Vitamin B1 - may be key to a range of vascular problems for people with diabetes.” Diabetes researchers know that previous animal research has already established such a link. The author of the article - Kathryn Mays-Wright - begins by comparing thiamine to a positive role model that can actually “teach” cells how to overcome the bad influence of glucose. Kathryn notes that when the vitamin is deficient, “your cells are literally soaking in a toxic

Symptoms of EMS Imbalances:

- **Drinking and urinating excessively.**
- **Fat deposits in the shoulders, rump, above the eyes, and cresty necks that can get thick and hard.**
- **General obesity, until the latter stage of the disease when there is weight loss and muscle wasting.**
- **Depression and lethargy, sensitivity to touch in the flank and barrel.**
- **Thick curly coat which is slow to shed, and sometimes patchy shedding and odd sweating patterns, especially in the Cushing’s horses, but may also be present in laminitis and IR.**
- **Impaired immunity and lowered resistance to infections and to skin and dental infections in particular.**
- **Tendency to founder, also toward winter laminitis episodes.**
- **Varying degrees of muscle tightness or even tying-up.**

glucose bath. This gives glucose ample opportunity to move in and cause all sorts of problems, from fatigue to neuropathy.”

Easy Balance is an offshoot of Dynamite’s wonderful magnesium supplement, **Easy Boy™**, which has been used successfully for calming as well as for assisting IR and Laminitic/Cushing’s horses. Our previous recommendation was to add 1 mg to 3 mg or more of health food store-bought chromium to the **Easy Boy** but now it is done for you in one convenient supplement! Here’s to Balance—Dynamite **Easy Balance!**