

# D*i*agnosis + D*i*et/D*r*ugs + T*r*im + E*x*ercise

Effective Management of EMS (*Equine Metabolic Syndrome*) and PPID (*Cushing's Disease*)

## DIAGNOSIS:

- Do not fast your horse before the blood draw. Have hay or pasture available. No grain
  - No heavy exercise or trailering 48 hours prior to blood draw
  - Draw blood in quiet barn
- Request these tests: ACTH, Insulin, Glucose, and Leptin (aka "Metabolic Panel" at Cornell).**

### What your vet needs to know:

- Blood should be kept cool, then spun and separated within 2 hours (4 hours maximum, but not recommended)
- Freeze the plasma; freeze or chill the serum
- Send to Cornell (recommended) on ice by overnight courier

**NOTE: Discount shipping labels are available through Cornell.**

## DIET AND DRUGS:

- EMS is managed with diet
- PPID is managed with pergolide (brand name Prascend®) or cabergoline

**IF YOU ARE IN CRISIS, IMPLEMENT THE TEMPORARY EMERGENCY DIET.**

### TEMPORARY EMERGENCY DIET

*(daily amounts for 1,000 lb. horse)*

- 20 lbs grass hay (weighed dry), soaked for 30 minutes in hot water or 60 minutes in cold water. Drain the water where the horses can't get at it (full of sugar)
- 1 to 2 Tablespoons iodized salt
- 1 teaspoon magnesium oxide
- ¾ cup ground or stabilized flax
- 2,000 IU Vitamin E (must be in contact with an oil in order to be well absorbed)

### BASIC NON-EMERGENCY DIET

- Grass hay of less than 10% ESC – NOT WSC or NSC – plus starch, fed at a rate of 2% of body weight
- Minerals balanced to the hay (not difficult once you wrap your head around it)
- 1.5 oz per 500 lbs ground or stabilized flax
- 1 to 2 Tablespoons iodized salt
- 2 IU per lb body weight Vitamin E (must be in contact with oil to be well absorbed)

**No pasture, apples, carrots, sweet feeds, grains, or most bagged feeds (list of safe bagged feeds on the back)**

## TRIM:

- Trim should be balanced to internal structures of the hoof
- Short toe is essential. Long toes may look normal (because they are common), but long toes interfere with healing and can cause continued pain
- Ideally, laminitic horses should be trimmed at intervals of no more than every 4 weeks. Every 2 weeks is ideal at the beginning of the recovery stage

## EXERCISE:

Exercise is the best insulin-buster available, but a laminitic horse should never be forced to move. Do not ride a laminitic horse, or lunge, or work one in a round-pen (no circles) for a minimum of 6 months after the laminitic episode has resolved. Twelve (12) months is a better interval to allow for a full hoof cycle of normal laminar attachments



**Equine Cushing's and Insulin Resistance Group Inc.**

**Free Outreach Group:** <https://ecir.groups.io/g/main>

**Website:** <https://www.ecirhorse.org>



# Safe Feeds and Acceptable Ration Balancers

**Everything you feed your EMS/PPID horse should be less than 10% ESC and starch combined**, with the starch component being less than 4%. It is best if there is no added iron (e.g., ferrous sulfate) in the ingredients, because iron overload can worsen EMS. These safe feeds are to be used as carriers for the vitamins and minerals. Hay is the mainstay of the diet. If your horse cannot eat hay, then contact the ECIR Outreach Group for more information: <https://ecir.groups.io/g/main>.

**Please be wary of bagged feeds that say: "low starch, low sugar, for metabolic horses" or similar.** Many feed manufacturers can legitimately say "low starch" because the feed has less starch than oats; or can say "low sugar" because there isn't a lot of added sugar, but there is enough starch to cause laminitis in an EMS horse.

## SAFE FEEDS LIST

- **Beet Pulp** (*molasses-free*) Rinsed/soaked/rinsed  
Soak anywhere from 15 minutes in warm water to a couple of hours in cold water – enough so the pellets/shreds swell/soften.
- **Soy Hull Pellets**
- **Triple Crown Naturals Timothy Balance Cubes**
- **Ontario Dehy Timothy Balance Cubes**
- **Nuzu Stabul 1**
- **LMF Low NSC Stage 1**
- **LMF Low NSC Complete**
- **Haystack Low Carb/Low Fat Pellets**

## REAL RESULTS OF BALANCING MINERALS TO HAY



BEFORE

AFTER



## LIST OF ACCEPTABLE RATION BALANCERS

For best results, one should feed a custom mix of minerals balanced to your hay; in lieu of that, using one of these ready-made balancers can be a second-best option:

- **Uckele U-Balance Foundation**
- **California Trace Plus**
- **Colorado Mix** (no selenium)
- **Colorado Se Mix**
- **Vermont Blend**
- **VifArgent Le Cheval au Naturel**
- **Mad Barn AminoTrace+**

For areas where added Manganese is necessary:

- **Equi-VM**
- **Sport Horse Grass**
- **Equi-Base Grass**
- **Arizona Copper Complete**

It is important to find out if you are in a Selenium-rich or Selenium-deficient area; the same applies to Manganese. Your agricultural extension office should be able to tell you.



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