

Nutritional Needs for Insulin Resistant & Cushings Horses

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Now that you've joined the EquineCushings Group, you'll be hearing a lot of new information about equine diets. Diet is extremely important for insulin resistance control, and can help prevent or even reverse complications like excessive weight gain or loss, muscle wasting and weakness, abnormal fat deposition, and laminitis. Much of the information you gain will be new to you, but it's soundly based in science and with time you'll find it makes a lot of sense and isn't nearly so difficult as it may have seemed initially.

Step one is to implement the emergency diet that was emailed to you. This will help address some of the most common important deficiencies and lower the simple carbohydrate portion of your horse's diet. If it turns out your horse is not insulin resistant, no harm is done. This diet is appropriate as a base for any horse, although working, growing, and pregnant horses will have special needs for calories and mineral levels.

Many horses experience a dramatic improvement in the symptoms listed above within days to a few weeks using just the emergency diet. However, this diet doesn't necessarily complement the forage you are feeding to create a totally balanced diet in terms of mineral ratios. For optimum long term control and general health, you need to have a hay analysis done so that specific mineral levels can be used that match the profile of your hay and other adjustments so that protein, amino acid, and vitamin needs are met on an individual basis as needed. While there are many companies that do forage analysis, each is a bit different in their evaluation of sugar and starch. These are crucial for our needs, and we are most familiar with results from Dairy One's equine division, Equi-Analytical. Request Test #603, which includes sugar, starch, and appropriate minerals. (<http://www.equi-analytical.com>)

Once you have your hay results, you can ask for help from group members familiar with the math, evaluate the hay yourself using the Hay Analysis Calculator to get a good idea of what your mineral needs are, or ask a professional such as Dr. Kellon, who developed the diet and mineral plan being used here, to coordinate your diet and supplements.

It is very important to realize that if you do the diet yourself, even with the help of other list members, there may still be areas where mineral balance is not optimally addressed. Factors involved other than the numbers on your hay analysis include:

- long term intake of hay in the past from the same region without balanced minerals
- influence of toxic minerals such as aluminum, molybdenum, sulfur, boron or other minerals in the soils and water of the region where the hay was grown (these do not show up on hay analysis for the most part)
- regional low soil levels of important minerals that do not show up on the hay analysis, such as cobalt
- use of water from natural sources (ponds, etc.) or unfiltered well water

- influence of other health problems on mineral requirements – e.g. coat or hoof quality issues, arthritis, allergies, skin problems, tendon/ligament problems, nervousness/behavior issues, frequent infections, chronic infections, slow hoof growth

Any of these may require supplementation of one or more minerals, amino acids or vitamins in amounts that are different from the general recommendations. While the general guidelines will help significantly, we cannot provide do it yourself guidelines that will work optimally for each and every individual situation. It's just not that simple. For example, some supplements that would be very helpful for a horse with chronic, long standing foot pain from laminitis would be potentially contraindicated with an acute laminitis.

In general, for best and quickest results, consider getting professional input if any of the above conditions apply, or if your calculations show your horse will end up taking in equal to or greater than 4 times the NRC recommended intake of any mineral. Its also well worth getting professional input from Dr. Kellon if you have tried mineral balancing yourself for a month or so and not seen quite significant improvement, as this would indicate that there is some factor still unaccounted for that is causing problems.

Comprehensive mineral balancing involves researching your geographic region and the region where the hay was grown (if that is different), analysis of your individual horse's history, calculations of requirements, formulation of supplement programs, and troubleshooting help as you get started. This takes time to do correctly. So does math help from group members. Because of the huge membership of this group, as well as members' other commitments, as much as we would like to do it for free that would be a full time job in and of itself so a fee may be requested for math help or required if personal diet balancing is requested from Dr. Kellon herself. However, if you compare this to what it costs you to have a single emergency vet visit, the cost is minimal and we believe that you will find it to be quite effective and valuable towards the health and quality of life for you and your equine companion