WINTER CARE OF THE INSULIN RESISTANT HORSE -- AN INTERVIEW WITH DR. ELEANOR KELLON, D.V.M.

By Lori Teresa Yearwood
http://naturalhorsejourney.typepad.com/a_natural_horse_journey/

Dr. Kellon is an equine nutritionist and veterinarian who, for many, needs no introduction. Founder of Equine Nutritional Studies, she is one of a handful of experts in the field of applications of nutraceuticals for horses. She is an authority in the field of equine nutrition as well as conditions effecting performance horses. As co-owner and moderator of the Yahoo Equine Cushigns and Insulin Resistance Group (a list with more than 8,000 members), Dr. Kellon is lovingly referred to as " a fairy godmother" to countless numbers of horses, as her generosity of time, spirit and knowledge has saved many equine lives -- and human hearts!
I am grateful and excited to share a recent interview with her here.
* Please know that she is available to you through her online equine nutrition and health classes at www.drkellon.com as well as for private consultations via drkellon@gmail.com

SKODE: Why do horses with Insulin Resistance and/or Cushings need special care in colder weather?

Dr. Kellon: Cold causes hormonal changes. Sudden cold snaps trigger a release of cortisol, which makes IR worse and can influence the way the blood vessels in the hoof respond to vasodilators. The process of adapting to cold also normally involves a rise in thyroid hormone levels, which helps keep the horse warm. Many IR and Cushings horses, when not in good control, have suppressed thyroid levels so they may not have this extra warming response. The harder the body has to work to stay warm, the less blood is delivered to the extremities. This, together with an already damaged blood supply, could be why many previously laminitic horses develop foot pain in cold weather.

SKODE: What is the definition of "colder weather" for a metabolically challenged horse?

Dr. Kellon: It probably depends to some extent on what they are used to, but the foot pain response has been reported at temperatures 40 Fahrenheit and below.

SKODE: Will you tell us a bit about the clinical studies and/or anecdotal evidence of your successful experience/treatment with these special needs horses and cold weather care?

Dr. Kellon: The Equine Cushing's list has had a lot of experience with "winter laminitis", which is the most obvious manifestation of cold weather problems in these horses. Back in 2005 we did a field trial involving 10 horses that suffered from cold induced foot pain for several years prior. We used the adaptogen APF because it had worked the prior winter for another member's horse with the same problem and two urinary cortisol:creatinine ratio tests were well within normal despite an elevated ACTH. Adaptogens like APF can partially block cortisol release. During the trial, some participants switched to Canadian ginseng instead and that also worked well. When more help was needed, we added the amino acid arginine, in the form of AAKG - arginine alpha-ketoglutarate, to support nitric oxide sythesis. Nitric oxide keeps blood vessels dilated. All horses made it through the winter without their usual hoof pain.

SKODE: What kind of care do you specifically recommend?

Dr. Kellon: In addition to the supplements above for hoof comfort, these horses should be protected from

getting wet and chilled, blanketed to help them maintain their body heat. Wrapping the lower legs and using fleece lined boots helps preserve good circulation to the feet.

SKODE: What are some of the ramifications that can occur if a horse owner does not take special care of their special needs horse in cold weather?

Dr. Kellon: The hoof pain is the worst of it, but horses struggling to stay warm will go into negative energy balance and lose weight quickly. The weight loss is easily missed under a winter coat. The stress of cold is not good for a Cushing's horse. As mentioned, cortisol releases occur and can worsen IR, leading to actual acute laminitis in addition to any pain related to poor blood flow.

SKODE: What if a horse is Insulin Resistant but in regular work and doing well -- do they still tend to need special care in colder weather?

Dr. Kellon: If the horse is kept in regular work and has returned to normal blood work, no special care is needed.

SKODE: Do you like the idea of leg warmers for horses?

Dr. Kellon: Yes.

SKODE: Should horse owners who like to take a "natural" approach to horse care worry hat blanketing a horse hampers his or her ability to warm himself because the hairs of the horse are "flattened" and thus can not capture heat/release heat, etc. Is this true?

Dr. Kellon: It's true, but I think these are horses that are not generating extra heat the way normal horses do. Even normal horses with good coats sometimes require blankets, especially their first winter when exposed to a cold environment. Common sense needs to be used too. If the horse is sweating, the blanket is too much.

SKODE: Are there herbs and/or whole people can feed internally to help warm a horse from the inside? What are those herbs (or some of them) and how do you recommend feeding them?

Dr. Kellon: The two adaptogens I mentioned, APF and Canadian ginseng, work by helping to normalize the hormonal picture. The most warming thing you can feed the horse is a high fiber diet. During the fermentation of fiber in the large intestine, heat is released that warms the horse from the inside out. I avoid the "hot" herbs like Asian ginsengs or cayenne because some of these have effects on the heart.

SKODE: Any herbs/whole foods we should be careful not to feed?

Dr. Kellon: Just the usual high sugar/starch items. It also helps to avoid large meals in favor of more frequent feedings or a slow feeding set up.