

The Equine Clinic at OakenCroft

Winter Newsletter 2021

Let Them Eat Cake!

Feeding a horse with Cushing's Disease (PPID) vs.
Feeding a horse with IR

Carlin Jones, VMD

Cushings disease does not cause laminitis. Did I blow your mind? Most of you have heard us talk about Cushing's Disease (PPID is the proper term) for years, and in the last 12 years we have talked about IR a great deal. There is a lot of overlap and the subject is confusing to say the least, but the point of this article is talk about why we feed these horses differently. We will not discuss medications used to manage these conditions, that is for another day.

Lets recap what each of these conditions is. Pituitary Pars Intermedia Dysfunction (PPID for short) also known as Cushing's disease is a condition of the pituitary gland in the brain that results in the horse having too much cortisol in their system. Not shedding, poor topline, pot belly, trouble fighting of infection, and excessive peeing and drinking are the most common symptoms. Note that I did not say laminitis. PPID is more common in older horses and in some breeds. Insulin Resistance (IR for short) also known as Metabolic Syndrome is dysregulation of how the body responds to insulin. All cells have insulin receptors. When insulin binds to them the cell takes in glucose (blood sugar). In horses who have IR the receptors need more insulin to be activated. This means the glucose stays in the blood longer and gets to higher levels. The problem with this is that high blood sugar can cause issues with circulation in the tiny blood vessels that serve the feet, resulting in laminitis. This laminitis is often unnoticeable for years but over time can become devastating. IR is by far the leading cause of laminitis we see in horses and the hardest to manage. Many IR horses who have a significant laminitis episode never return to 100% as the damage is irreversible once its bad enough to show external signs. IR is not exclusive to horses, in fact in humans it's part of being pre-diabetic and can become Type II diabetes. IR can occur in any breed, but is more common in easy keepers (ponies I'm looking at you) and can occur in horses as young as 3. Most IR horses are overweight but not all. Saddlebreds and Arabs are more likely to be thin with lumpy fat deposits. For years we thought these conditions were variations of the same problem but we now understand that they are separate and distinct conditions involving different hormones and causing different symptoms.

So now we know that we have two distinct conditions, lets throw a wrench into it. PPID and IR can occur in the same horse at the same time. The older chunky Morgan is the poster child for this, but no breed or age group is exempt. When a horse has both of these conditions each one is harder to manage. Higher cortisol levels make resistant insulin receptors more resistant. Higher blood sugar exacerbates high cortisol levels.



IR Fat lumps



Cushings Hair

However, lots of horses have only one of these conditions and not both. We break horses into three categories. One group has only PPID, another has only IR, and the third has both PPID and IR. Lets talk about how we feed these horses. Who here was told that horses with PPID can't have sugar? I was. Because when PPID was first identified we didn't know that we were dealing with two separate conditions, but now we do so we know they need to be fed differently.

Lets talk about the first category, the PPID horse. This horse has normal insulin sensitivity. A PPID horse who is of a healthy weight can eat a normal diet of free choice hay and a concentrate (grain) appropriate for their activity level and age. If this horse is underweight, or becomes underweight, he can have a higher fat and higher calorie concentrate but not necessarily one that is low starch or low sugar. Senior feeds are great choices for these horses when they don't hold their weight on their previous grain. Now I'm not saying that the PPID horse can live on pixie sticks, molasses and jelly beans, but this horse also does not need the horse equivalent of Atkins either. A forage based well balanced diet is what these horses need.

Now the IR horse, that is a horse of a different color, or different metabolism. This is the horse that needs the lower sugar diet, horsey Atkins if you will. The non structural carbohydrates (NSC, meaning the combination of sugars and starches) should be less than 10% in the whole diet, that means hay and grain and supplements. Unfortunately this number is not one you can find on feed tags, you have to look up each grain on the manufacturer's website. Hay must be tested because there is no way you can tell how much sugar is in hay without testing, but here are some general guidelines for hay. Grasses accumulate more sugar when they are stressed. Cold, drought, heat, and overgrazing all stress grass out. So first cutting hay, stemmy hay, and hay cut early in the morning after a frost are all likely to be higher in sugar. You would think the "crappier" hay would be better for these horses but actually, much like Wonder Bread, the less nutritious foods often contain more sugars. The IR horse still needs nutrition, but he needs it with less sugar and possibly less overall calories. He needs his calories to come from protein and fat, and must still take in essential vitamins and minerals. For this reason we suggest ration balancers for the overweight horse. Think of them as a pelleted vitamin pill for horses. Feeding just a very small amount of another grain leaves most horses with unmet needs as they are not designed to be fed in small amounts. Ration balancers are. A horse who is underweight with IR, the skinny lumpy ones, need a very special diet, one high in fat and protein and still less than 10% NSC. Alfalfa hay, while having a reputation for being rich, actually tends to be lower in NSC than grass hays so it's a great option for the skinny IR horse. Horses who have both IR and PPID should be fed the same as horses with just IR.

So horses can have two major endocrine disorders, PPID and IR. They are separate and distinct conditions with different nutritional needs. PPID horses can have moderate sugar diets, IR horses need lower sugar diets but still need nutrition. In cases where horses have both conditions, they should be fed the lower sugar diet. The skinny IR horse is especially tricky to feed but it can be done. All of these horses benefit from a collaboration between owner and veterinarian, with input from nutritionists when necessary.

"Crazy Horse Person"

I get it now

Suzanne Jaynes, MVB

Growing up I begged my parents for a horse but was always told that it was just not possible. That dream never went away, but school kept me busy, then kids, a mortgage, you know, LIFE, got in the way. When COVID hit, like others, the uncertainty of the future had me nervous. Then serendipitously, an opportunity presented itself and I found myself saying, "YOLO, get the damn horse." He was a 22-year-old, black Cheval Canadian foxhunter ready for retirement. In other words, he had been there, done that. Aside from being extraordinarily handsome, he was a perfect fit for this out of shape middle-aged woman and her small children.

I was always able to empathize with clients on a veterinary level. I have the technical training and passion for horse care but never truly understood the depth of the horse-owner connection. You've heard the term "crazy horse people." They are the folks that endearingly over spoil their horses with bags of \$30 treats, spend hours a day grooming an animal that will inevitably roll in the mud seconds later, those that will spare no expense to give their horse the best of everything while they themselves are strapped to make ends meet. I didn't understand what drove that.

Now that I have Taylor, I find myself asking the most absurd questions: Is he cold? Does he need a blanket? Should I clip him? Does he need any supplements? Am I riding him too much? Or not enough? Does he like the horses next to him? Does he even like ME? Does he mind that I kiss him on his big fuzzy lips every time I see him because I love him more than what is probably appropriate?

Burying my face in his thick fall coat conjures memories of being nine years old, mesmerized by how something so giant could be so gentle. His natural kindness and patience toward my children and the smiles he places on our faces are just a couple reasons spoiling him brings me so much joy. Horses hear us when we don't speak. They make our hearts grow just by being nearby. Recently, as I was purchasing his monthly \$18 salt block and his \$19 bottle of Show Sheen (you know, for all of those shows we are not doing), it occurred to me. I am a crazy horse person. I'm okay with that. Turns out, it's a pretty cool club to be in.



Meet the 2020-2021 Interns of ECO!

Dr. Megan Calitri



Growing up in northern Rhode Island, Dr. Megan Calitri began riding horses at age six. With her childhood home filled with pets, Megan always had a love for animals and, with it, decided to pursue a career as a veterinarian. She earned her bachelor's degree at the University of Rhode Island and continued her education in Prince Edward Island, Canada at Atlantic Veterinary College (AVC). Megan is excited to be completing her internship at ECO and focusing on ambulatory equine medicine. Her special interests in equine medicine include reproduction, dentistry, lameness, and preventative medicine. Megan shares her life with two retired backyard horses and her rescue dog Annie. In her spare time, she enjoys trail riding, spending time with Annie, and exploring upstate New York.

Dr. Abby Krzanowski



A Massachusetts native, Dr. Abby Krzanowski knew from a young age she wanted to be an equine veterinarian. She spent every spare moment of her childhood at her grandmother's horse farm and rode primarily Hunter/Jumper, competing in local schooling shows. Abby completed her undergraduate degree at the University of Massachusetts Amherst where she worked at their equine facility and was involved with their breeding program. She then went on to attend the Cummings School of Veterinary Medicine at Tufts University. At Tufts, Abby worked as a surgery technician in the Hospital for Large Animals. She was also very involved with the Student Chapter of the American Association of Equine Practitioners (AAEP). Abby's interests include emergency medicine, lameness, reproduction, and preventative care. She is very excited to be part of the Equine Clinic at OakenCroft team and explore New York. In her free time, Abby enjoys hiking with her husband and their dog, Gus, spending time with her mare, Felicity, and reading on the beach.

★ By grouping our clients by geographical region we are able to offer a reduced call charge at \$20/owner. All work is required to be paid at the time the service is provided.

★ Once scheduled, you will be called 24-48hrs prior to your appointment with a timeframe for your visit. Unfortunately, we cannot guarantee times in advance.

★ Preventative Health Care Services include: vaccines, Coggins, dental care, sheath cleanings, and collection of fecals for parasite control.

If you wish to schedule one visit with vaccines only, feel free to choose from any of the dates listed. **Additional services such as dentals, coggins, sheath cleaning, and fecal egg counts are preferred to be done on RED dates. Blue dates may have these services done, but are preferred for vaccines only.** *Soundness evaluations, diagnostic imaging, and/or in-depth problems are to be scheduled for a different visit.

★ It is advisable to limit the number of vaccines given at one time to reduce reactions.

County	Towns Included	Dates	Doctor
Eastern Greene	Hannacroix, Medway, Earlton, Coxsackie, Leeds, Catskill, Climax, Athens, Surprise Preston Hollow, Durham, East Durham, Greenville, Norton Hill, Cornwallville, Freehold, Medusa, Cairo, Saugerties, Palenville	3/5 3/10 3/17 3/22 4/7 4/12 5/12 5/21 5/24	Dr. Betsy Colarusso
		3/16 3/25 4/1 4/20 5/6 5/11 6/3 6/25	Dr. Carlin Jones
West Greene	Windham, Ashland, Hunter, Tannersville, Westkill, Lexington Prattsville Acra, Round Top, Purling	3/15 3/31 4/26 5/19 6/7 6/29	Dr. Betsy Colarusso
Northern Schoharie	Schoharie, Wright, Cobleskill, Richmondville, Warnerville, Carlisle Sharon Springs, Gallupville, Howes Cave, Cherry Valley	3/9 4/8 4/27 5/10 6/1	Dr. Megan Calitri
		3/23 4/6 4/16 4/22 5/14	Dr. Carlin Jones
Southern Schoharie	Middleburgh, Jefferson, Grand Gorge, Gilboa, Summit, Cooksburg, Livingstonville, West Fulton	4/14	Dr. Megan Calitri
		3/30 4/13 6/29	Dr. Carlin Jones
Eastern Schoharie/Schenectady	Esperance, Sloansville, Schenectady, Rotterdam, Princetown, Scotia, Glenville, Niskayuna, Duaneburg, Delanson, Charleston	3/23 4/19 5/25 6/2	Dr. Megan Calitri
		3/9 4/8 5/18	Dr. Carlin Jones
West Montgomery	Canajoharie, Ft Johnson, Fonda, Ft. Plain, Palatine Bridge, Sprakers, St. Johnsville Fultonville	3/30 4/21 5/11	Dr. Abby Krzanowski
		3/19 4/27 6/8	Dr. Carlin Jones
East Montgomery/WestSchenectady	Amsterdam, Hagaman Glenville, Pattersonville	3/16 4/2 5/4 6/15	Dr. Abby Krzanowski
Fulton	Broadalbin, Caroga, Dolgeville, Gloversville, Johnstown, Mayfield, Northville, Northampton, Perth	3/11 4/30 6/4	Dr. Betsy Colarusso
		3/2 5/27	Dr. Carlin Jones
Northern Albany	Albany, Colonie, Latham, Menands, Watervliet, Green Island, Cohoes Guilderland Slingerlands, Delmar, Glenmont	3/12 4/23 5/28 6/10	Dr. Betsy Colarusso
		3/4 4/9 4/29 6/18	Dr. Carlin Jones
Southern Albany	Altamont, Voorheesville, New Scotland, Westerlo, Rensselaerville Knox, Berne, East Berne, West Berne Feura Bush, Clarksville, Selkirk, Ravena	3/1 4/19 5/3 6/14	Dr. Betsy Colarusso
		3/11 3/26 4/15 4/23 4/29 5/4 6/1 6/11 6/24	Dr. Carlin Jones
Northern Berkshire	Williamstown, Pittsfield, Cheshire, Lanesboro, Hancock, Dalton, Hinsdale, Peru, Richmond	3/17 4/5 4/23 5/5 5/21	Dr. Jen Safford
		3/1 3/26 4/30 5/3 6/8	Dr. Allie Catalino
Southern Berkshire	Lee, Lenox, Great Barrington, Monterey, Tyringham	3/3 4/14 5/7 5/10	Dr. Jen Safford
		3/22 4/16 4/20 6/25	Dr. Allie Catalino
Eastern Berkshire	Otis, Becket, Worthington, Hinsdale, Peru, Middlefield, Chester	3/8 4/28 6/28	Dr. Jen Safford
		3/19 4/30 5/28	Dr. Suzanne Jaynes
Northern Rensselaer	Petersburg, Berlin, Hoosick Falls, Troy, Johnsonville, Schaghticoke, Melrose, Cropseyville, Grafton, Wynantskill, Poestenkill	3/12 3/24 4/19 6/9 6/14	Dr. Jen Safford
		3/2 3/8 4/2 5/5	Dr. Allie Catalino
		3/18 3/25 4/29 5/20	Dr. Suzanne Jaynes
Southern Rensselaer	Averill Park, West Sand Lake, Schodack, East Greenbush, North Greenbush, Schodack Landing, Nassau, East Nassau, Stephentown, Castleton	3/26 4/1 4/9 4/21 5/26 6/2 6/16	Dr. Jen Safford
		3/10 3/15 4/6 4/26 5/14 6/10	Dr. Allie Catalino
		4/8 4/15 6/11 6/17	Dr. Suzanne Jaynes
Western Columbia	Valatie, North Chatham Ghent Malden Bridge, Stuyvesant Falls, Hudson, Claverack, Philmont, Old Chatham, Livingston	3/4 3/15 3/22 3/29 4/12 6/11 6/23	Dr. Jen Safford
		3/5 3/16 4/21 6/15 6/22	Dr. Allie Catalino
		4/16 5/13	Dr. Suzanne Jaynes
Eastern Columbia	Austerlitz, Spencertown, Canaan, New Lebanon, Hillsdale, Copake, Ancram, Chatham, East Chatham	3/18 4/15 5/13 6/21	Dr. Jen Safford
		3/24 3/30 4/13 5/17 6/30	Dr. Allie Catalino
		4/1 4/9 6/10	Dr. Suzanne Jaynes
West Saratoga	Clifton Park, , Ballston Spa, Ballston Lake, Saratoga, Corinth, Galway	3/29 4/19	Dr. Allie Catalino
		6/4	Dr. Suzanne Jaynes
East Saratoga	Halfmoon Schuylerville, Charlton, , Malta, Wilton, Waterford Mechanicville, Gansevoort	3/5 4/2 5/7	Dr. Suzanne Jaynes

When scheduling the appointments, please remember to provide a current list of boarders at your facility. For larger stables (* stables that have multiple horses and owners in their care*), it is easier for the stable owner/manager to make an appointment for the entire barn to be done on the same day so no one gets missed. Having a sign-up sheet in the barn can make it a more efficient day for everyone involved. **Owners, we NEED you to also confirm with the office--no work will be done without prior confirmation.**