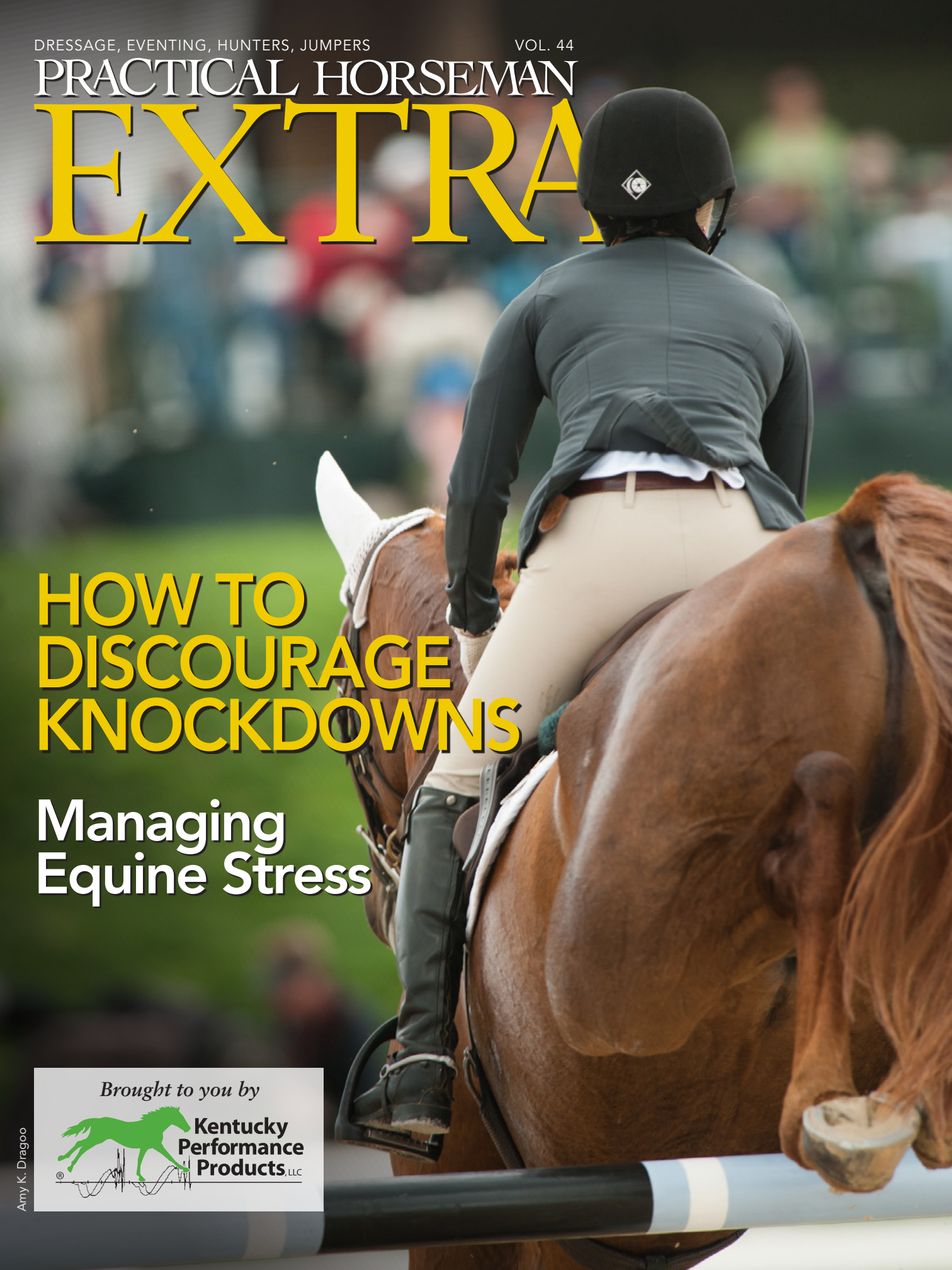
DRESSAGE, EVENTING, HUNTERS, JUMPERS VOL. 44

PRACTICAL HORSEMAN

EXTRA



HOW TO DISCOURAGE KNOCKDOWNS

Managing Equine Stress

Brought to you by

Kentucky Performance Products, LLC

Amy K. Dragoo

RESEARCH UPDATE SPONSORED BY KENTUCKY PERFORMANCE PRODUCTS

Equine Metabolic Syndrome/Insulin Dysregulation: Don't Forget About Protein

by Jane Manfredi, DVM, MS, PhD, DACVS-LA, DACVSMR (Equine)
Assistant Professor, Michigan State University College of Veterinary Medicine

When we think about ideal diets for horses with equine metabolic syndrome (EMS) and/or insulin dysregulation (ID), the first things that come to mind for many are to avoid grain and to minimize the nonstructural carbohydrate (NSC) content in the food.

Current recommendations suggest that NSC should be kept at <10-12% to avoid triggering an insulin spike that could lead to a bout of laminitis.[1] To maintain a low NSC and yet allow the diet to have appropriate amounts of vitamins and minerals, owners often opt to feed a ration balancer vs. traditional grain.

This small volume of pellets can be fed at an NSC of less than 12% and is often recommended by veterinarians to supplement primarily hay diets.

Lowering insulin blood concentrations at rest and after meals is a goal to minimize laminitis risk, and owners are rightly frustrated when they don't see improvements. "I'm soaking the hay, they aren't on grain except for a ration balancer, they live on a dry lot, they are getting appropriate exercise, but I just can't seem to budge the baseline or oral sugar test insulin concentrations" are common refrains in these instances.

While this issue could be related to the horse's pituitary pars intermedia (PPID) status, the amount and type of exercise they are getting, the actual tested NSC content of the hay, and the presence of other chronic illnesses, another possible cause of the persistently high insulin levels that has been overlooked until as of late is the ration balancer's protein content.

While not as important as overall NSC content in triggering insulin responses (Macon et al., 2022[2]), recent work has shown that ration balancers with protein concentrations of above 30% can themselves cause insulin spikes (Loos et al., 2019[3]).

In fact, EMS horses fed a ration balancer with 31% protein had a "9-fold greater insulinemic response" as compared to healthy control horses.

As some ration balancers are produced with protein in the 15% range, for EMS/ID horses that are having issues improving insulin regulation, a change to the lower protein ration balancer may be part of the solution to improving metabolic health.

REFERENCES:

1. https://sites.tufts.edu/equineendogroup/files/2020/09/200592_EMS_Recommendations_Bro-FINAL.pdf, accessed 8/15/22

2. Macon, E. L., Harris, P., Bailey, S., Barker, V. D., & Adams, A. (2022). Post-prandial insulin responses to various feedstuffs differ in insulin dysregulated horses compared with non-insulin dysregulatedcontrols. Equine Veterinary Journal, 54(3), 574–583. https://doi.org/10.1111/EVJ.13474

3. Loos, C. M. M., Dorsch, S. C., Elzinga, S. E., Brewster-Barnes, T., Vanzant, E. S., Adams, A. A., & Urschel, K. L. (2019). A high protein meal affects plasma insulin concentrations and amino acid metabolism in horses with equine metabolic syndrome. The Veterinary Journal, 251, 105341.

This special report is sponsored by Micro-Phase vitamin and mineral supplement.

Micro-Phase™

Recommended for horses with EMS/ID

- Low-calorie formula fills in the nutritional gaps when hay and less than the recommended amount of fortified concentrate is fed.
- Protein: 13%, NSC: 11%, ESC 2.9%.
- The palatable alfalfa-based pellet can be fed alone or mixed with other feedstuffs.

The horse that matters to you matters to us®

Developed by:

Kentucky Performance Products LLC

PH Extra Fall 22

KPPusa.com, 859-873-2974, info@KPPusa.com

Joint support you can count on at a price you can afford.

Joint Armor™

- 1 lb jar lasts one horse 75 days.
- Research-proven formula.
- Supports a lifetime of soundness.

Kentucky Performance Products, LLC®

PH Extra Fall 22

The horse that matters to you matters to us® Call 859-873-2974 or visit KPPusa.com to order today.

Here's How

How can I discourage knockdowns?

Q **My Adult Amateur jumper often knocks down rails with his front legs. What can I do to teach him to pick them up higher?**

SCOTT LICO

A First, consider why this is happening. Did your horse have this many knockdowns at a lower level? If not, he may not have the scope to clear the jumps easily at this level. Does he have this many knockdowns when other people ride him? If not, you may be doing something in the saddle that throws him off balance and interferes with his technique (ducking, getting ahead of the motion, missing distances, etc.). Ask a knowledgeable trainer to help you determine if you're dealing with either of these situations.

Once you've ruled those out, consider two other potential causes: poor jumping technique and lack of carefulness. Every horse is born with a certain jumping technique; we can improve it somewhat, but can never completely change it. Is your horse a little slow and unsure with his front end? Does he tend to hang his front legs or jump "over his shoulder" (fail to rotate his shoulders adequately so his knees don't come up in front of his body)? If so, practicing at home with gen-

There are several different reasons why a horse might knock down rails while jumping, such as rider interference, lack of scope or poor jumping technique.

© AMY K. DRAGOO/AIMMEDIA

erous ground lines can help to improve his technique by discouraging him from getting too close to the base of the jump, which doesn't give him time to use his front end properly on takeoff. Roll the ground lines out at least 2 feet—but no more than 3—from all verticals (keep oxer ground lines at the base). This will help to show him how to get his knees up and out in front of him.

Horses with excellent technique can still hit jumps out of carelessness or boredom, which results from jumping too often, showing too much or failing to vary the routine. All horses enjoy their jobs more and try harder when you mix up the routine and keep it fresh. In addition, I school with only standard jump cups, as flatter cups teach horses that rails fall down easily. I also use open-front galloping boots and quarter bell boots (which protect the heels from overreaches but minimize coverage in the front of the hooves) to avoid desensitizing horses to hitting rails.

Both careless horses and those with poor technique will also benefit from gymnastics. I like three exercises that utilize slightly shorter-than-normal distances to encourage horses to be quicker and more catlike with their front ends. The first is a bounce-to-bounce grid made of three verticals, spaced 11 feet apart. The second is a one-stride-to-one-stride line of three square oxers (with front and back rails of equal height), separated by 21 feet each. The third exercise, for more advanced riders only, is a vertical bounce to a vertical, set at a distance of 11½ feet, followed by a 20-foot one-stride to a square oxer, then a 21-foot one-stride to a vertical then 12 feet to another vertical, so you start and end with a bounce.

If you and your horse aren't familiar with gymnastics, begin with just the first two elements of your chosen exercise, then build up slowly. Adjust the distances to suit his natural stride—adding 6 inches to a foot if his stride is unusually long or subtracting that much if he's short-strided. Use ground lines for all the jumps, rolling out the ones for verticals.

For all three of these exercises, canter in at a medium pace. Start with the heights quite low, then gradually increase them, still staying below your competition height. (For example, if you're jumping 1.10 meters, don't raise the bounces above 1 meter.) Focus on keeping your position quiet, allowing your horse to figure out where to put his feet. As the heights increase, he'll get snappier with his knees and tighter with his legs. If you have a hotter horse, be especially careful with the third exercise, as the distances might get too short for him if he rushes through it.

Finally, when you warm up at horse shows, start with a small square oxer, then build up to show-ring height. Finish with one or two verticals to tighten up his form. If he rubs the fence in one of these last efforts, go to the ring on that. (A rub can be helpful, but don't try to force it.) Jump no more than 10 fences total. Save his best efforts for the show ring!

*Hunter, jumper and equitation trainer **Scott Lico** rode with Jim Hagman as a Junior, then trained with Karen Healey, ranking in the Pacific Coast Horse Shows Association's top 10 for Amateur Jumpers in three consecutive years before making his debut at the grand prix level. He began his professional career working for Mark Cassar at the Southern California Riding Club and serving as assistant trainer for Misti Cassar at Soprano Farms. In 2016, he relocated his business to Middle Ranch in Lake View Terrace, California. In 2017, the Creek Fire destroyed half of Middle Ranch, and Lico moved his business closeby to Hacienda Del Valle. In November 2021, he closed his business for personal reasons, but continues to work in the horse industry riding and teaching for top barns.*

Is my horse bored?

Q **I've been told that horses get bored—either in their stalls or even when they're turned out 24/7—and that I should offer my horse things, like toys, to stimulate his mind while he's alone. Can you offer any suggestions?**

CAMIE HELESKI, PhD

A Although it's hard to prove that an animal of a nonverbal species experiences boredom in the same way humans do, scientists do believe that certain bad habits, called stereotypies, like cribbing and weaving, may be a result of boredom. However, when people worry that horses not exhibiting such stereotypies might still be bored—for example, when their riders go off to college and stop riding and showing them—this may just be a human perception of boredom. Our idea of what is needed to keep a horse's mind engaged is likely different from what is really driving horses biologically. Studies of equine behavior suggest that in order to be content horses primarily need three things: forage, turnout and social interaction.

Horses have a very strong drive to forage, or graze. In the wild, they spend more than half the day foraging—moving slowly from spot to spot: step, step, graze, step, step, graze. They rarely move quickly, but all the little steps throughout the day add up. In midwinter, you'll still see pastured horses with plenty of hay in a hayrack diligently pawing at the snow to get to the grass underneath. They are naturally motivated to forage, even when food is easily available.

High-concentrate diets, on the other

hand, have been associated with stereotypies. We don't know if that is because the grain takes the place of some of the roughage in a horse's diet or because grain lowers the pH in his digestive tract, which may increase the risk for ulcers. Either way, high-roughage diets are preferable to high-concentrate diets. Any kind of roughage is fine—pasture, hay, alfalfa cubes, etc. (Note: If your horse has not been assimilated to eating grass all day, introduce it very gradually. If he is prone to founder, limit his access to grass.)

To maximize the number of steps he takes each day, turn your horse out as much as possible. In the wintertime or if the grass is sparse in his pasture, simulate a more natural foraging situation by spreading his hay around the pasture in small piles. This will encourage him to take more steps.

Horses are by nature herd animals. Both in the stable and the pasture, they are typically more content when they are near other horses. Sometimes a goat or even cattle will suffice. For other horses, though, there is no substitute for equine companionship, whether that's from another horse, pony or donkey. Even so, some horses may be perfectly happy living alone with plenty of forage, turnout and human interaction.

The only time when a horse might need a little extra mental stimulation is when he is stall-bound, for example while recovering from a serious injury. Such confinement can be very challenging for horses, particularly when they see their buddies head out to pasture every day. In this situation, ideally, leave another horse in the barn to keep yours company. Do your best to maximize his visual horizons by placing him in a stall with good views and, when possible, open windows. A shatterproof, stainless-steel mirror attached to the stall wall often helps as well. Toys that make horses work a little harder to obtain a treat may satisfy the foraging drive. For example, some treat balls release a small amount of pellets when pushed around the stall. (I'd recommend using one of these only in a very clean stall.)

In general, though, probably the best way to make your horse happy is to provide him with plenty of foraging opportunities, turnout and social interaction.

*Equine program instructor **Dr. Camie Heleski** taught at Michigan State University for 25 years before accepting her current role as a senior lecturer at the University of Kentucky College of Agriculture, Food and Environment. Her research focuses primarily on equine welfare and behavior. She is also the president of the International Society for Equitation Science, which encourages "ethical equitation" by promoting scientific research designed to study the most humane ways to train and care for horses. (For more information on this organization and to read its position statements on various issues, go to www.equitationscience.com.) A lifelong rider, Camie has shown Arabians, hunt seat, Western and saddle seat and now enjoys practicing lower-level dressage.*

© FRANK SORGE/ARND.NL

By nature, horses are herd animals that thrive on socialization and nearly constant grazing. If your horse seems bored or develops bad habits, try extending his turnout time.

Simple Solutions, Scientifically Proven®

Challenge	Product	Support
EPM, sore muscles, vitamin E deficiencies	Elevate® vitamin E	Healthy muscle, nerve and immune functions
Needs additional energy	Equi-Jewel® rice bran	Cool energy, safe weight gain, optimal performance
Electrolyte depletion, dehydration	Summer Games® Electrolyte	Electrolyte replacement, stimulates drinking
Hindgut imbalances, gas colic, ulcers	Neigh-Lox® Advanced	Balanced pH levels, comfortable stomach, healthy microbiome
Daily joint stress	Joint Armor™	Flexible, healthy joints
Spooky, tense, distracted	Trouble Free™	Calm, focused attitude

Developed by:

Kentucky Performance Products LLC

PH Extra Fall 22

KPPusa.com, 859-873-2974

The horse that matters to you matters to us®

Horses who are stressed when ridden often show signs of discomfort, such as teeth-grinding, tail-swishing and excessive sweating. Ultimately, stress could lead to decreased performance, difficulty with training and the development of gastric ulcers.

RELAX!

HOW TO BATTLE EVERYDAY HORSE STRESSORS

Make your horse's environment as natural as possible and maintain a consistent management routine to keep him healthy and happy.

By Leslie Threlkeld

Horses are built to run—more specifically, to run away from danger. It is their natural flight instinct that makes them hyperaware of their surroundings and ready, if necessary, to escape predators. However, humans have domesticated horses and placed them in a living environment and daily routine that hardly resembles what nature intended. This has inevitably changed the way horses respond to stressful situations because they cannot simply run away. Living part of their lives in a stall, relying on humans for most of their nutrition and working as riding or competition horses have also introduced stress factors that horses in the wild never experience.

"Stress is always about management and consistency. Compare what a horse would be doing in the wild. It would be in a herd, walking and grazing, and it would be slim pickings—no buckets of concentrated horse feed," says Ted Wright, DVM, of Cedar Ridge Animal Hospital & Equine Services. "Everything we do with them is a little unnatural. The closest we can get to natural has the potential to decrease the stress we've imposed on them."

Stress is not simply a feeling or a response to the environment. There is a process happening inside the body that can lead to chronic problems if left unchecked. When a horse is stressed, the body releases the hormone cortisol. Often referred to as "the stress hormone," cortisol is produced

© FRANK SORGE/ARND.NL

Stress or Emergency?

Many signs of stress are similar to signs of an emergency situation, including colic-like symptoms, diarrhea or going off his feed. How do you know what is normal stress and what warrants a call to your veterinarian?

According to Ted Wright, DVM, of Cedar Ridge Animal Hospital & Equine Services, a horse with diarrhea should always have his body temperature taken. A combination of runny manure and a fever (101°F or higher for an adult equine) could indicate a serious problem. A horse refusing grain meals or experiencing overt signs of colic should always be reported to a vet.

"Our number-one emergency as horse vets and the leading cause of death is colic. Any signs of colic, such as pawing, looking at the flank, excessive yawning or mouth movements merit a call."

© FRANK SORGE/ARND.NL

A horse who exhibits unpredictable behavior and is difficult to handle could be showing a chronic sign of stress.

by the adrenal glands and found in saliva and blood. Cortisol receptors are located in most cells and function to receive cortisol and use it in various positive ways, such as regulating metabolism, maintaining electrolyte balance and reducing inflammation. Cortisol is important for the healthy function of many of the body's metabolic and immunologic processes, but an unbalanced level of cortisol can lead to serious health issues.

"[Too much] cortisol weakens the body's natural defenses. It suppresses the immune system, so stressed horses are more prone to catch something from a neighboring horse or succumb to commensal [bacterial] diseases like rain rot and thrush," Dr. Wright says. "You can't always see outward signs, but internally this is what's happening. That's why some stressed horses fail to thrive. Any way we can restore comfort in them at a more consistent environment or schedule will reduce stress and make them healthier."

Signs of Stress

Horses will show signs of stress in various ways. Short-term (acute) effects of stress that go untreated may lead to more serious long-term (chronic) problems. Here are just a few of the many signs of stress. Every animal will display stress differently. Know what is normal for your horse so you can identify sudden changes in personality, behavior and habits.

Acute Signs of Stress

- Trembling
- Vocalizing
- Increased Heart Rate
- High Respiration
- Tense Muscles
- Sweating
- Shying
- Running
- Flared Nostrils
- High Head/Neck Carriage
- Worried Expression
- Tightly Pricked Ears
- Tail-Swishing
- Pacing
- Refusing Food

Chronic Signs of Stress

- Stall-Walking or Weaving
- Change in Attitude
- Depression
- Aggression
- Gastric Ulcers
- Teeth-Grinding
- Skin Infections
- Colic
- Dull Coat
- Bolting Food
- Anorexia
- Immune System Deficiencies
- Decreased Performance

Similar to people who internalize their emotions, some horses may feel stress but do not show outward signs until chronic effects are evident. This is frustrating for owners who see no indication of a problem but are suddenly faced with health issues.

Even if your horse seems healthy, you want to do everything possible to ensure that he is so he can better cope with stressful situations as they occur. That means having "a good preventive health-care program that includes annual dentistry, fecal exams and vaccines," Dr. Wright says. "Be proactive, especially if you know you're going to put a horse in a stressful situation."

To avoid compromising your horse's health, you want to identify factors that cause stress and reduce, avoid or eliminate them from his daily life. Here are seven common stressors that may cause your horse anxiety and how you can minimize them.

© AMY K. DRAGOO

The only accurate way a veterinarian can diagnose gastric ulcers is by using an endoscope (a 3-meter long flexible lighted camera), which is passed through the horse's nose and can allow a direct examination of the stomach lining.

Stress and Gastric Ulcers

Gastric ulcers are a common result of chronic stress and cause a large amount of anxiety for owners. Unfortunately, ulcers often go undiagnosed until the effects become serious. Cortisol, a hormone released by the adrenal glands during stress, reduces the production of the hormone prostaglandin, which then lowers the pH (increases the acidity) of the stomach. In turn, the stomach's protective mucous lining is less effective and susceptible to damage. The development of lesions (open sores or wounds) on the stomach lining may cause abdominal pain, reduced appetite, colic and poor body condition.

The only way to definitively diagnose gastric ulcers is by passing an endoscope (a flexible tube that allows a veterinarian to see inside the body) through the nose to the stomach. Gastrogard® and Ulcergard®, whose active ingredient is omeprazole, are the only FDA-approved medications for treatment and prevention of gastric ulcers and work to inhibit the production of excess stomach acid. In addition to medical care, it is also important to attempt to identify the cause of ulcers to avoid recurrence.

With a veterinarian's recommendation, horses prone to developing ulcers may receive preventive doses of omeprazole prior to exposure to stressful conditions. There are also many daily supplements on the market that claim to reduce stomach acid or act as stomach buffers, coating and protecting the delicate stomach lining. Feed supplements are not subject to FDA testing, therefore, before using one, check with your veterinarian or select a supplement that has peer-reviewed research available to back up its claims.

© LESLIE THRELKELD

Groom and barn manager Courtney Carson, pictured with the Dutch Warmblood mare Starr Witness at The Fork Horse Trials, strives to keep the event horses and jumpers in her care happy and healthy through a consistent routine.

Stressor 1: Changes In Routine

Horses thrive on consistency, and suddenly switching their routine is a surefire way to cause stress. Try to feed grain around the same time every day and keep horses on a regular turnout schedule. Occasional, short-term changes aren't usually a big stressor for most horses, but stay as close to their normal schedule as possible. If a major change in a horse's routine is unavoidable, try to make it gradually.

Courtney Carson is a professional groom and barn manager for Doug Payne Equestrian in Aiken, South Carolina. With both eventing and show-jumping horses of all ages and experience levels in her care, she has to keep a consistent schedule not only to complete chores with efficiency but also to make sure the equines in her charge stay healthy.

"[In my experience] the number-one cause of stress is a major change in routine, like if all of a sudden they go from night turnout to only going out for a couple of hours during the day or if the barn goes from being quiet to having a ton of activity," Courtney says.

The nature of Doug's training and sales business means that horses are moving in and out of his program frequently. Any time a new horse comes into the barn Courtney's priority is making sure he stays hydrated, "even if it's only coming from an hour down the road" to decrease the risk of colic as a result of dehydration.

"Horses going from well water to city water and vice versa might think the new water smells or tastes different, but you can get water into them when they eat," Courtney says. A new horse's first several meals will include a mash of wheat bran mixed with plenty of hot water for easy digestion and additional water intake. Typically, this process takes two to three days. For example, the first two meals will be all bran mash, the next two meals will be half bran mash and half grain followed by one more meal with almost the full amount of grain and just a little bit of bran mash. Finally, the horse will receive his normal grain meal without bran.

Courtney also will introduce new horses to the stable's turnout and training system gradually. Starting with limited supervised turnout with a quiet equine companion gives her an idea of how the new horse behaves in the field. After a couple days, Doug may ride the new horse quietly for only 15 or 20 minutes and slowly increase the workload to assimilate the horse into his training program.

© ELENATHEWISE - STOCK.ADOBE.COM

You can help cut down on the stress of stall rest by keeping your horse in a high-activity area of the barn, where he can stay social and see other horses nearby.

Stressor 2: Stall Rest

No matter how careful you are, injuries cannot always be prevented. In some cases, a horse may be prescribed stall rest during recovery that can cause significant stress and anxiety due to boredom, loneliness, pain or discomfort from the injury and lack of exercise.

When confined to a stall for an extended period of time, a horse needs to be kept hydrated and on a consistent feeding schedule. Dehydration can cause impaction colic and an inconsistent feeding schedule may upset the intestinal flora that aids in digestion, leading to an increased risk of colic or other digestive problems. A veterinarian may recommend administering a gastric supplement during long periods of stall rest to avoid the development of gastric ulcers (see "Stress and Gastric Ulcers" on page 10).

Stall rest can be frustrating for normally active horses. Preventing boredom can help keep them from developing vices such as pacing and weaving in the stall or becoming depressed or aggressive. Toys such as Jolly Balls are a great way to keep a horse occupied while on stall rest. If you are crafty, you may also make homemade toys for your horse. Fill an empty plastic jug with grain or treats, remove or poke holes in the lid and hang it in the stall with a hay string. He will have fun trying to get the goodies out of the container.

"When we have a horse on stall rest, we try to keep him in a high-activity area of the barn where people are always walking by and can say 'hi.' It keeps him interactive. We will also put him where he can see another horse or is next to another horse so he never feels isolated or alone," Courtney says.

Stressor 3: Vet and Farrier Care

The vet, whose regular visits are necessary to ensure the health and well-being of a horse, isn't always a welcome visitor. Being poked and prodded during examinations can be intrusive and some horses will come to recognize a vet and have a negative response to her arrival. Similarly, horses may dislike having their feet handled by a farrier for long intervals or the hammering noise and sometimes the smell of hot shoeing while being shod.

Horses who associate stress with vet and farrier visits should be worked with calmly and patiently. "They build on good experiences," Dr. Wright says.

On the morning of an appointment, Dr. Wright wants to keep the horse's routine as close to normal as possible. Feed and turn out around the same time and bring your horse in only within the hour of the scheduled appointment.

"If I know they're going to be stressed by me, I'll take them into an open area and have my tech handle them for a while before I even come up to them," Dr. Wright says. Sometimes distracting the horse by offering treats while vaccinating or administering treatment also helps.

© DUSTY PERIN

Staying calm and patient with your horse is key to helping him be as comfortable as possible during a stressful vet visit, especially if he's had a negative experience in the past.

Often if an owner has had a bad vet or farrier experience and is anticipating a negative response from the horse, her stress will project onto the animal and make things worse. Sometimes it is productive for the owner to step away altogether and observe from a distance.

Despite appropriate preparation and calm interactions, some horses will still find the vet or farrier to be too much to handle that day. "If it starts going bad, I stop," Dr. Wright says. "There is nothing that we're usually doing on those routine appointments that can't wait."

Stressor 4: Riding and Training

Studies show regular exercise may reduce a horse's cortisol levels. However, the high-intensity training and competition schedule of a performance horse or a situation where a horse is working with discomfort may cause the opposite response. Frequent signs of stress while being ridden are chomping or grinding the bit, tail-swishing, excessive sweating and the inability to relax. Over time, this may lead to decreased performance, difficulty with training and the development of gastric ulcers.

All riders want their horses to be happy, compliant partners with a good work ethic, an interest in learning and a successful career. However, it may not be the work itself creating your horse's stress. An

© AMY K. DRAGOO/AIMMEDIA

Sudden changes in weather, such as an incoming storm or a severe drop in temperature, can elicit a stressful response from horses.

underlying problem could cause discomfort during riding. If your horse seems to be stressed under saddle, here's a checklist to identify the source.

■ Inspect your tack to make sure the saddle and bridle fit correctly and are not causing soreness.

■ Have a veterinarian perform a physical exam to check for lameness or discomfort in his body. Consider a massage or soothing liniment bath to relieve sore muscles.

■ Check that your horse's teeth aren't causing mouth pain.

■ Ask your farrier to look for an abscess, ill-placed nail or foot soreness. Were there recent changes in the way the horse was shod? Is your barefoot horse ready for shoes?

If your horse's physical health checks out and his shoes and tack fit properly, talk to your trainer about what you as a rider can do to reduce stress. Maybe your horse is especially worried when hacking out alone or is tired of working in the confined space of the arena. Could it be that the questions being asked of him are too difficult for his current fitness level?

Stressor 5: Travel

Traveling is one of the most stressful situations for horses. They are not only going to an unfamiliar location, they are usually experiencing a significant change in routine. Depending on your horse's stress triggers, take steps to ease the anxiety of travel as much as possible.

■ Make sure your horse stays well hydrated. Powder or paste electrolytes administered orally encourage him to drink. A bran mash or watered-down meals will also increase fluid intake.

■ Give him plenty of access to hay throughout the trip to keep him occupied and keep the gut functioning properly.

■ If your horse is accustomed to regular turnout but there is none available, take him for frequent hand-walks to keep him out of his stall as much as possible.

■ Talk to your vet about administering a preventive dose of omeprazole prior to traveling. This will reduce stomach acid caused by elevated levels of cortisol and ward off gastric ulcers.

Stressor 6: Weather

Not every stressor is imposed upon horses by humans. Weather is a natural occurrence that can cause stress responses.

From the rise and fall of the thermometer's mercury reading to a dramatic shift in barometric pressure accompanying incoming severe storms, changes in weather patterns affect some horses. A sudden variation in weather may alter drinking, grazing or exercise habits, leading to gastric distress, dehydration or mild colic.

Horses may have trouble adjusting to fluctuating temperatures (20 to 30 degrees or more) in the course of a single day or week. Keeping an eye on the forecast and planning ahead makes a big difference in preventing weather-related stress.

When it comes to weather, Courtney will add bran mash to the horses' regular meals. This is not a complete diet change but it does invite them to eat and continue getting water. "I'll give them bran for three meals a day during a major temperature swing or once a day if the weather is going to be weird all week. Then I try to always keep fresh water and hay in front of them," Courtney says.

Varying weather patterns are not the only concern. A horse who is too hot or cold is also susceptible to illness. Watch that your horse doesn't have too much or too little hair for the climate and be careful not to over- or under-blanket in winter.

Stressor 7: Reproduction/Pregnancy

A mare in estrus, or heat, may experience physical discomfort due to the development of a follicle on an ovary or frequent urination—one indication to other horses that she is ready to be bred. Behavioral estrus symptoms also include decreased performance under saddle, difficulty being handled and colic-like symptoms. Consider a treatment such as altrenogest (Regu-Mate®) which stops a mare from coming into heat or consult your veterinarian about other available options to reduce estrus symptoms. (Read "To Ease the Stress of Estrus" in the April 2018 issue of *Practical Horseman* for more about managing your mare's heat cycle.)

A pregnant mare will experience stress during labor due to the pain of contractions and the birth itself. She may paw, pace, sweat, lay down and get back up many times or bite at her belly in response to discomfort. If she continues to exhibit these signs after foaling, your veterinarian may recommend administering medication for pain relief such as phenylbutazone or Banamine®.

Depending on a horse's personality, environment and routine, he may find many reasons to be stressed. However, good management practices, such as keeping as many aspects of his life as regular and consistent as possible and avoiding sudden changes in routine or diet, will help reduce stress and promote physical and mental health. Dr. Wright concludes, "Make changes and have good experiences compound on each other."

Managing an insulin-resistant horse?

Ask your vet about

InsulinWise®

- Maintains healthy insulin regulation and normal body weight.
- Supports a decreased risk of laminitis.
- Formulated with a research-proven blend of polyphenols and amino acids.*

*Manfredi JM, Stapley ED, Nash D. Effects of a dietary supplement on insulin and adipokine concentrations in equine metabolic syndrome/insulin dysregulation. In J Equine Vet Sci 2020:88:102930.

NutrientWise®

- A nutritional supplement specifically formulated for horses/ponies on restricted diets.
- Contains protein levels appropriate for EMS horses.
- Low in NSC, ESC and calories.
- Palatable pellet that can be fed alone or mixed with other feedstuffs.
- Recommended and sold by veterinarians.

VETERINARY FORMULA
Wiser Concepts®

Available only through your veterinarian.

Developed by:
Kentucky Performance Products, LLC

KPPvet.com, 859-873-2974