

SPECIAL REPORT

Supporting Show Horse Health

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How can you best support your competitive show horse? Start with what fuels the fire.



GETTY IMAGES

Your show horse is a marvel of athleticism, bred and trained to perform incredible feats. But like any athlete, his joints and soft tissues sustain wear and tear with use, especially if you don't care for them properly. Routine preventive care is the best medicine for extending the life span of your horse's moving parts. From dental and hoof care, vaccination, and deworming to comprehensive joint therapy and pre- and post-exercise stretching, being deliberate about preventing problems ultimately enhances your horses' well-being, long-term health, and performance.

One organ system that is particularly sensitive to the trials of competition is the gastrointestinal tract. Here are three aspects of the GI tract that can negatively affect a show horse's performance and quality of life if not managed appropriately.

1. Dietary Excess

One pitfall into which many owners plummet when feeding performance horses is overfeeding, contributing to the high rate of obesity among competitive show horses.

Shannon Pratt-Phillips, PhD, from North Carolina State University's Department of Animal Science, in Raleigh, and colleagues conducted a study evaluating 377 ponies participating in national hunter competitions (Pratt-Phillips et al., 2023). Despite being considered elite athletes, more than one-third (35%) were obese or "dangerously overweight," with body condition scores of 7 or higher on a 9-point scale.

"Overweight horses carry more weight, so they need to work harder," Pratt-Phillips says. "Horses with excess condition might not clear jumps or they may fatigue more easily than horses with

ideal body condition scores of 5 or 6 on a 9-point scale. That weight also increases limb force pressures, which may add to joint and lower limb soft tissue stress, which has been proven in other species."

Osteoarthritis is incredibly common in equine athletes, as are tendon and ligament injuries. Kyla Ortved, DVM, PhD, Dipl. ACVS, ACVSMR, the Jacques Jenny Endowed Term Chair of Orthopedic Surgery at the New Bolton Center, in Pennsylvania, says injuries of the deep and superficial digital flexor tendons and suspensory and collateral ligament desmitis occur relatively commonly in sport horses, in addition to the osteoarthritis that develops as horses get older with more years in work.

"There are a lot of demands on the athletic body as they train and compete, which can lead to injury," she explains.

Any excess body condition can potentially increase the loads on those joints and soft tissues. So while judges might prefer the appearance of a pudgier competitor, as Pratt-Phillips found in her 2021 study, both she and Ortved agree that excess condition does not benefit these horses.

Excess adiposity (fat) also increases the risk of insulin dysregulation (ID), a component of equine metabolic syndrome (EMS). Although EMS can occur in nonobese horses, obesity is a risk factor for this endocrine condition, which show horses as young as 7 years of age can develop.

"Classic signs of EMS in obese horses include starting to develop some fat deposits on the rump or cresty neck and orbital (around the eye) fat deposits; sheath or mammary gland edema (fluid swelling); and showing some divergent

hoof rings," says Amanda Adams, PhD, of the Gluck Equine Research Center at the University of Kentucky, in Lexington. "Look for subtle signs of them shifting their weight. Overall, they just look like they don't quite have pep in their step.

"The biggest way to prevent EMS-ID is to be proactive with managing the weight and adiposity of the horse," she adds.

2. Microbiome

The intestinal microbiome refers to the bacteria, viruses, archae (single-celled microorganisms lacking internal membranes and, often, living in extreme environments), and protozoa that populate the large intestine (the cecum and colon). Those microorganisms are responsible for fermenting feeds to produce volatile fatty acids used for energy as well as immunity. Many factors can affect the microbiome, including changes in diet, weight loss/gain, obesity, transport, training intensity, disease, and age.

Show horses are at risk of dysbiosis, which occurs when the intestinal microbiome becomes disrupted.

"An altered microbiome can cause the tight junctions between the cells lining the wall of the intestinal tract to break down, resulting in a condition called 'leaky gut syndrome,'" Pratt-Phillips says.

When horses have a leaky gut, intestinal contents, bacteria, and toxins are absorbed into the bloodstream and circulate throughout the body. Signs of leaky gut include behavior changes, poor performance, insulin dysfunction/EMS, loose manure, allergies presenting as skin lesions and itchiness, and chronic/recurrent colic.

“There are many ‘stressors’ of showing or transporting that may negatively affect the microbiome,” says Pratt-Phillips. “Virtually every show horse is getting something different while at competition: different feed (hay or grain), feeding schedules, new additives or other treats that might not always be offered. All of these ‘stresses’ have a big impact on gut health.”

3. Glandular Gastric Disease (Gastric Ulcers)

When considering show horses’ GI tracts, another condition to think about is equine gastric ulcer syndrome, or EGUS. Gastric ulcers are defects in the surface of the stomach lining.

Many of us might immediately think of the ulcers affecting the squamous or upper region of the stomach, such as those that often occur in race-horses. But research findings suggest show horses are more likely to have ulcers in the glandular or lower region of the stomach instead.

Although both fall under the umbrella term EGUS, glandular and squamous gastric disease are two distinct conditions. Risk factors for glandular

disease are management-related, while those for squamous disease are typically dietary. Specifically, horses are at an increased risk of glandular disease with exercise frequency—more than four to five days per week (Vokes et al. 2023)—making rest days important for gastric health.

A veterinarian should perform an endoscopy exam to diagnose gastric ulcers, because other causes of chronic pain, such as musculoskeletal or dental pain, can be indistinguishable. Only then can the horse’s health care team implement appropriate preventive measures and a treatment plan.

Pro Tips for Show Horse Health

Here are practical steps you can take to keep your horses feeling and performing their best:

Manage Their Weight “Feed your horses like the athletes they are,” says Pratt-Phillips. “You wouldn’t see overweight Olympic runners or hurdlers. In places where appearance counts, groom, shine, bathe, and feed lots of omega-3s to get those good looks from within, not by making them ‘conditioned’ (aka overweight).”

Protect the Microbiome “Try to minimize

dietary changes at shows,” says Pratt-Phillips. “Bring your own hay when you can, or at least bring enough to transition to the new hay.”

In addition, keep your horse’s rations the same, and don’t start giving feeds you wouldn’t normally, such as bran mashes or other meals to which your horse is not accustomed.

Minimize Stress Reduce your horse’s stress to protect his stomach from glandular disease. This might include giving him two or three days off from work per week, reducing environmental stressors, and minimizing the number of trainers, handlers, and riders who work with him.

Be Proactive About Joint Health Detecting musculoskeletal injuries early is key. “Try to be acutely aware of how the horse is training, how it is feeling,” says Orted. “Make sure we give horses time off training as needed and try to optimize training to increase fitness and performance without overstressing the body.”

Work with your veterinarian to monitor your horse’s GI and joint health, and stay a step ahead of arthritic changes through weight management and conscientious training. 🐾

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