INFLAMMATION AND YOUR HORSE

Inflammation is like dessert – a little can be a good thing, but too much and you are going to have problems.

Simply stated, inflammation is the immune system responding to an injury, infection or allergy. The result is an increase in blood flow and the movement of white blood cells to affected regions, along with a release of chemicals called cytokines that help initiate the inflammatory response and healing process. Inflammation is just one way the body can protect itself from pathogens or begin healing.

However, if the inflammation continues or spreads – becomes chronic or systemic – your horse can experience severe health implications such as:

- Laminitis
- Skin allergies
- Insulin resistance
- Equine metabolic syndrome
- Behavior issues

Systemic inflammation is often the result of an underlying issue such as Leaky Gut Syndrome (LGS) or elevated blood glucose levels.

Leaky Gut Syndrome occurs when the lining of the gastrointestinal tract is damaged. This damage may be due to everyday stressors, such as extreme temperatures, exercise, diet changes, pathogens or travel and trailering. When damaged, harmful substances can cross the intestinal barrier and be absorbed into the bloodstream. This "leak" into the bloodstream will cause intestinal inflammation as the horse's immune system reacts to the invasion. Leaks often start slowly and are small, but over time grow and can progress to whole-body or systemic inflammation. Unfortunately, it's often not until a large response has occurred that we notice the problem.

Blood glucose levels can be affected by obesity, insulin resistance or the effects of cortisol – a stress hormone. The horse can no longer clear glucose from the blood stream and use it for upkeep, immune function, reproduction or performance. The connection between high blood glucose levels and systemic inflammation is cyclical. High blood glucose leads to systemic inflammation and this inflammation can further elevate glucose levels resulting in a vicious feedback loop.

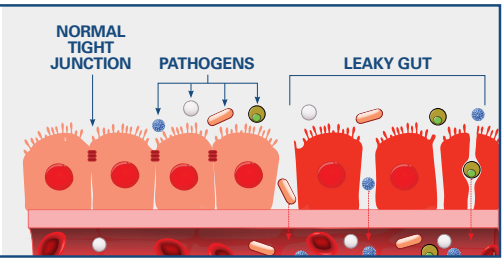
In either case — LGS or high glucose levels — a combination of nutritional solutions and management changes are required to improve or mitigate the problem.

Delivering nutrients such as butyric acid or zinc deep into the gut of the horse can strengthen and heal the gut barrier, making it less prone to leaks. A targeted probiotic proven to help balance the gut microbial population and inhibit pathogenic bacterial growth can improve overall gut health. Additionally, supplemental chromium has been shown to increase insulin sensitivity and reduce both blood glucose and cortisol levels.

POINTS OF STRESS CAN ADVERSELY

AFFECT ANIMAL PERFORMANCE

BY WEAKENING THE TIGHT JUNCTIONS IN THE INTESTINAL BARRIER.



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