

## DIETICIANS BOAST HEALTHFUL BENEFITS...WHAT ABOUT YOUR HORSE?



The nutrition industry is beginning to understand what role fermentation, gut bacteria and gut microbiome play in human and animal health. Science has just scratched the surface and is beginning to understand the activity of the microorganisms in the digestive tract and the mechanisms of action related to those microorganisms and food choices.

Fermented foods are gaining attention in the human nutrition space, but what does that mean for our equine companions? Increasing amounts of research studies are suggesting fermented foods have powerful health benefits ranging from promoting gut health, controlling inflammation, and providing other healthful experiences. “Fermented foods” are being emphasized by registered dietitians as something to not ignore in food selections. So, how do we share these benefits with our horses without inviting them to eat Kombucha, yogurt, avocados, sauerkraut, and pickles?

A balance of good quality forage as the base of the horse’s diet and a feed concentrate that includes fermentation metabolites is key to maintaining healthy gut flora and a strong immune system. You might be asking, how do I know what is an effective and beneficial fermentation product? And how do I know my feed or balancer concentrate contains this?

I have invited a guest writer Christine W. of Diamond V to share more information and some supporting science regarding fermentation metabolites.

“Fermentation metabolites produced by Diamond V are unique, bioactive compounds that work naturally with the biology of the horse to strengthen and empower the immune system, support digestive tissue integrity, and promote a healthy microbial community. Hundreds of these compounds are produced from a proprietary anaerobic fermentation process of *Saccharomyces cerevisiae* and work synergistically inside the animal to help them perform to their full genetic potential.

These compounds help the horse’s immune and digestive system function normally in face of the many stressors and challenges, specifically hauling, training, breeding, herd dynamics, and environmental factors.

In other words, this specific species of yeast, produce several products or compounds that are beneficial to the microbiome in the horse’s hind-gut. When the horse’s gut is working optimally, everything from digestive to immune function is set up to be resilient in the face of stressors and challenges that might otherwise compromise animal health and performance.”

Fermentation metabolites benefit your horse’s digestive tract by supporting a healthy gastrointestinal microbiome. The millions of little bacteria that live in the digestive tract all have names and each one ferments complex carbohydrates resulting in volatile fatty acid production. These acids impact digestion, absorption and the overall gut health. On a feed label you might see yeast culture listed (or *S. cerevisiae* extract). When fermented by the horse’s microbiome, these specific *S. cerevisiae* yeast culture metabolites have been shown by to support tissue strength and

integrity, contribute to a stable hind-gut pH and support a healthy gut microbial community as well as a balanced immune response when challenged by stressors.

So why is improved tissue strength, integrity, and digestive health important to horses?

Horses with a strong digestive tract are better able to absorb nutrients from the foods that they eat. Research has shown that harmful substances are less likely to permeate the gastrointestinal cellular wall. Think of it as closing your screens on your windows to keep bugs out of your house, but to allow fresh air and good things to flow in. Horses need to have a strong gut to absorb amino acids, fats, vitamins, minerals, and other nutrients, and prevent unhealthy bacteria or harmful substances from getting into circulation and causing problems. By absorbing the good nutrients and getting rid of the potentially harmful substances horses are more likely to perform to their full potential. Their immune and digestive systems are supported to handle the challenges that come with hauling, training, and just being a horse in changing environments.

This article was written with collaborative authors Heidi A., Emily L., and Christine W.