

Probiotics in horses

By Dr. Laura Taylor, DVM

There is that old saying, “no foot, no horse.” a strong case can also be made for “no gut, no horse.” in the wild, a horse moves up to 15 miles in a day and eats for 18 to 20 hours per day.

A small amount of forage is constantly passing through the digestive tract the majority of the time. In contrast to that, the domestic horse that is used for performance/show/racing has a vastly different lifestyle which includes confinement and restricted, intermittent feeding, low forage/high grain diets and stress from training, trailering and competing. Other stresses to the gastrointestinal system of a horse may include frequent vaccination and the regular use of pharmaceuticals such as antibiotics and non-steroidal anti-inflammatories.

The horse is a grazing animal designed to chew all day long. Chewing produces saliva which neutralizes stomach acid, which is constantly being produced; therefore, the horse should never have an empty stomach. Unfortunately, many performance horses are confined in stalls for up to 14 hours per day and much of that time they are not eating anything. This is a classic recipe for the development of EGUS or Equine Gastric Ulcer Disease.

Horses should be fed hay continuously via a slow feeding system or at least every 5 to 6 hours in order to buffer the stomach. Also, the

feeding of high grain diets contributes to the increase in stomach acidity and damage to the stomach lining, setting it up for ulcers. The incidence of gastric ulcers is surprisingly high at between 55% and 90%, with racehorses having the highest amount.

Non-steroidal anti-inflammatory drugs (NSAIDS) such as Phenylbutazone (Bute) and Banamine have been shown to induce stomach ulcers in horses. NSAIDS are commonly used for musculoskeletal pain and to enhance athletic performance. Unfortunately, many horses on NSAIDS are already suffering from gastric ulcers due to other causes such as intermittent feeding and stress from trailering and showing, thus the use of NSAIDS can only worsen a pre-existing ulcer. Antimicrobial drugs or antibiotics certainly have their place in the fight against bacterial infections; however, a side effect of these drugs is a disruption in the normal microflora or population of intestinal bacteria and other beneficial micro-organisms. There are more microorganisms in the intestines than all the cells in the entire body. Gut flora play a significant role in keeping the intestines working properly in their functions of

Probiotics, cont'd

absorption and digestion of nutrients. Since up to 70% of the immune cells of the entire body are located in the wall of the intestines, whole body health is reliant on an optimum population of gut micro-organisms.

The use of probiotics in horses has become increasingly popular in the last decade. Probiotics, also known as direct-fed microbials, are live, protected yeast cultures and healthy bacteria. They are often combined with prebiotics and digestive enzymes for overall gut support. Their uses include treating digestive upset, improving digestibility of hay and absorption of nutrients, maintaining healthy levels of digestive bacteria and stabilizing the acidity of the hindgut, thus lowering the chance of ulcer formation in the colon and cecum.

Whenever the gastrointestinal system is under stress, for instance during the use of antibiotics, dewormers or anti-inflammatories, probiotics can ensure some level of protection of the gut's normal flora, integrity of the lining of the gut and immune function of the gut locally, as well as the whole body. Other times of stress where the use of probiotics is highly recommended include at weaning time for both mare and foal, when changing or adding in rations, when going from winter hay to spring pasture and when changing the type of hay fed.

In my holistic veterinary practice, I find that horses are kept the healthiest if they stay on a very high quality probiotic at all times.

The gastrointestinal system is probably the most vulnerable of all the organ systems in the horse and with all the artificial factors involved in the life of a domestic horse, his gut is always being challenged. A wild horse lives a vastly different life. Having tried various probiotics over the last 15 years, I have very high expectations of a probiotic; one should actually see a difference or improvement in the horse while on it, instead of having him on a probiotic just for the sake of it, yet not seeing any positive changes. Some positive changes that may be seen include: an improvement in coat quality, better consistency of manure, faster healing from wounds and injuries and less distension and tightness of the belly or abdomen.

I am a huge advocate of using higher or stronger doses of probiotics during times of stress such as heavy training, trailering and competing, and when using antibiotics or anti-inflammatories, such as Bute. **I recommend to my clients the paste form of Equine Choice probiotics** during times of high stress and then for other times a maintenance dose of the powder form.

The incidence of stomach ulcers being as high as they are, one must assume that possibly every other horse may be dealing with an ulcer. Probiotics don't heal full blown stomach ulcers, however they do assist the gut with overall digestion and improved immunity and they likely also assist in the prevention of ulcers in the colon or large intestine, which can be as common as stomach ulcers. In my veterinary practice, probiotics are a very high priority supplement that I recommend for all of my horse patients. I have seen wonderful improvements in countless horses on probiotics. Their use is a very proactive approach to improving the health of our equine companions as well as optimizing athletic performance. It is about having them be all they can be.

Dr. Laura Taylor graduated from the Ontario Veterinary College and moved to Calgary in the mid-90s. Over a 15-year period, she received training in veterinary chiropractic, acupuncture, homeopathy, herbal medicine, osteopathy and craniosacral therapy. She has a 100% holistic veterinary practice for horses and dogs where she mostly treats horses and dogs for musculoskeletal and performance issues.

The advertisement features the Equine Choice logo at the top left. Below it, a list of benefits is provided: Temperature Stable, Live, and Canadian Made, accompanied by a small red maple leaf icon. To the right, there are images of the product packaging: a white tub of Equine Choice Probiotics and a white jug of Acid FX. At the bottom left is a blue starburst graphic, and at the bottom right is the FeedStore logo with the tagline 'to your door'.