Let's Discuss Horse Manure: How Its Texture, Odor and Frequency Can Aid Horse Owners in Detecting Stomach Problems and Gastric Distress as Early as Possible

By: Dr. Amy M Gill

Horse manure is the most widely scrutinized "by-product" of horse husbandry. Owners, trainers and barn managers often observe the consistency of the manure the horses in their care produce. With good reason, the texture, odor and frequency of manure production can tell a lot about the general health and well being of a horse. So let's talk a bit about how the horse's environment, including stabling, turn out, water intake, exercise, illness, nutrition and de-worming can affect horse manure.

Horses that are stabled on a continuous basis with little turn out face a multitude of stressors. Stress can negatively affect the entire endocrine system and lead to digestive tract upset. Gastric ulceration can also be a result of sustained stress in a horse. Many horses that live under a high level of stress have inflammatory bowel issues. When this occurs, the lining of the digestive tract becomes leaky and the horse is predisposed to many health issues. Manure produced by these horses often has a very foul odor and can look "slimy" or mucous covered, indicative of hind gut disturbance. To correct the problem, horses should have ample amount of free time turned out with a buddy or group. Making sure horses have continuous access to forage when in the stable or turned out can also help keep the gut healthy. Adding Omega 3 fatty acids to the ration is also suggested for horses that are stressed and produce abnormal manure. Omega 3's help by reducing inflammation in the gut which helps correct the disturbance and creates a healthy environment for the microbial populations that reside there.

Hydration status can also have a large effect on manure quality. A dehydrated horse will produce very dry, hard manure that can lead to impaction colic. Make sure horses always have plenty of cool, fresh water. In the stall, water should be offered by automatic waterer or two-5 gallon buckets should be available at all times. Clean these buckets out and refill with fresh water daily. In the field or paddock – the same applies: make sure the water tank is clean and does not have warm or hot water in it. Check auto waterers daily to make sure they are working. Make sure there are enough water sources if large groups of horses are turned out together. Otherwise, the horses at the bottom of the pecking order in the herd may be completely deprived of water.

Exercising horses have an increased need for water and electrolytes over horses at maintenance. Water and electrolytes help maintain fluid balance in the horse and provide a mechanism for the horse to cool itself through sweating. If the horse is losing a lot of sweat, it must be supplemented with a salt (not dextrose or sucrose) based electrolyte and free choice water. In hot summer months, intensively exercised horses may need to drink 20-30 gallons of water per day to prevent dehydration and hard, compacted manure.

Sick horses often present loose manure or true diarrhea. A vet can help look at possible causes and offer solutions. Along with veterinary treatment, administering an equine specific, live probiotic should commence at once in any animal that has diarrhea. Repopulating the digestive tract with equine origin microbes is of the utmost importance in the treatment of any sick horse, especially if antibiotics are being administered. Other nutrients, such as glutamine, an amino acid used as an energy source by the cells in the lining of the intestine, may be helpful in healing the gut of a horse that has been sick with diarrhea.

Good nutrition will play the largest role in maintaining health in the horse and hence the production of healthy manure. All horses must be fed at least 1.5% of their body weight daily as long stemmed fiber in order to maintain a healthy microbial population needed for fiber fermentation. Grain is not a required feed for horses, but long stemmed fiber is. Over feeding grain and not enough forage will lead to an unhealthy digestive tract and in most cases, loose, unhealthy looking manure. Using high quality concentrates, when needed, with more fat and fiber and less grain is advised to help keep the gut healthy and manure properly formed.

Always make feed changes gradually over time so as not to upset the gut and cause loose manure. For example, many caretakers panic when a horse goes from consuming grass hay to alfalfa hay because the manure may become loose. Alfalfa has taken a bad rap for this and it's not just due to the nutrient composition of alfalfa. For any forage change, if the transition is made very slowly, the microbial population will change as the type of hay changes and very little difference in manure consistency should be seen. It is important to point out, however, that alfalfa is a much more soluble fiber than grass hay and therefore it naturally helps to keep the gut hydrated. This is a good thing! Alfalfa-fed horses have well hydrated manure – they are not sick!

Horses carrying a high parasitic load will often have sour smelling, loose and slimy manure. Managers should be prudent in making sure horses are de-wormed as needed, but not unless a medium to high parasitic load is detected by a fecal count. The days of routinely de-worming every 6-8 weeks are over as this has led to drug resistance. It is best to periodically do fecal exams on horses as opposed to even rotational deworming. In the long run, it is more accurate, economical and much safer for the horse. Sometimes after de-worming horses will get runny, loose manure. The best way to quickly remedy this is to again administer an equine specific, live probiotic so that the normal population that may have been disrupted by the de-worming chemical can be re-established.

Manure quality is a very good indicator of horse herd health and can tell you when a real problem is occurring. Understanding how horses should be managed so that stress in minimized and herd health is maximized will help keep the horse manure looking good!

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