Dear Dr. Weldy's,

I've noticed this fall that our horses are drooling and dropping saliva all over their feed troughs. They seem to act normally, but it sure makes a mess. What is going on?

Dear Reader,

We get this question quite a lot in the summer and fall around here. Usually, the cause is benign, but there are several that are more serious to consider. First, a few facts. Equine saliva is produced from three pairs of salivary glands around the mouth and head; the parotid, sublingual, and mandibular. Combined they produce 10 gallons of the slimy, slippery stuff every day. That saliva moistens and lubricates food to ease the transfer down the esophagus and into the stomach. It also contains electrolytes, sodium bicarbonate, and the enzyme amylase. Sodium bicarbonate helps to buffer the acid in the stomach and amylase begins the digestion process.

The first specific cause of hypersalivation is also the scariest. Rabies is a rare condition for horses, but an extremely serious one. Rabies can occur in any mammal and is most commonly transmitted to horses through a bite wound. The virus multiplies at the bite site and migrates down peripheral nerves from the spinal cord to the salivary glands stimulating increased production of saliva. Rabies is 100% fatal in horses, but completely preventable with vaccination. If your horse exhibits any neurological symptoms along with hypersalivation, please avoid contact with the drool until your veterinarian arrives.

Another cause of too much slaver is injury to the oral cavity. This can take the form of tongue injuries, ulcers on the inside of the lips and cheeks, or embedded foreign bodies. Tongue lacerations do occur in the horse occasionally and bite wounds to the tongue can happen during a traumatic event. Ulcers of the oral mucosa are usually caused by improperly used or ill-fitting bits, foreign bodies, or viral induced. The most common foreign body in the mouth we see are embedded sticks or wood pieces followed by grass awns or burrs.

More familiar triggers to hypersalivation for veterinarians are choke and dental disease. Choke happens when your horse decides to eat his supper too fast and doesn't chew it properly. The food bolus is lodged in the esophagus preventing saliva from moving down to the stomach. Consequently, a frothy discharge containing saliva and food copiously drains from the mouth and nostrils. Dental disease leading to increased saliva production can take many forms. Sharp enamel points are the most common, but periodontal disease, gingivitis, and fractured cheek teeth are all possible.

But the most common reason for hypersalivation in our area is a fungus that grows on clover, especially red clover. As horses graze, they ingest the toxin slaframine produced by the rhizoctonia leguminicola. This chemical stimulates the parasympathetic nervous system which controls saliva production. I have never seen a case of red clover slobbers that was a health concern, but it has been reported in severe cases to lead to liver disease. However, we consider it more of a nuisance than anything. Often, all of these conditions will have many symptoms in common and it can be difficult to distinguish one from the other.

Your veterinarian can help you determine the cause of that slobbery horse.

-Dr. Wade Hammond