Winter Dehydration in Horses

It's a little known fact that horses can actually be thirstier in the winter than they are in the summer.

During cold weather, especially if the humidity is high, a horse's thirst mechanism does not always function as efficiently as it does in the summer.

Water is lost from a horse's body every day through the urine, feces and moisture in breath exhaled from the lungs. If the horse is performing during cold weather, significant water can also be lost from sweating.

Dehydration occurs if a horse loses too much water from its body and does not replenish it, or if a horse just is not consuming enough water every day to meet its bodily needs. A 3 to 4 percent loss of body water will cause mild dehydration.

Some horses will only drink five to six gallons of water per day, will eat normally and remain healthy. These horses are the exception; their kidneys have the ability to concentrate urine and recycle more of the water back into the body.

Most horses are not capable of this kind of kidney function and should be provided adequate, good-quality water. Most adult horses weighing 1,000 pounds require a minimum of 10 to 12 gallons of water each day for their basic physiological needs.

Good-quality water must be free of harmful germs, foreign material, excessive minerals, environmental pollutants and unusual flavors.

Occasionally, horses will eat snow if it is available and cut back on drinking water somewhat. Horse owners should not consider snow as a water source and should always provide an adequate supply of fresh, nonfrozen water.

Water is the most important nutrient, because it is needed for almost every bodily function. It helps maintain normal digestion and proper moisture level in feces, maintains normal blood volume and aids in the normal function of sweat glands.

There are two common complications resulting from inadequate water consumption during cold weather.

The first is decreased feed intake. Even if good-quality feed is offered, the horse will cut back on consumption if it is not drinking sufficient water.

One reason for this is the lack of saliva to mix with the feed as it is being chewed. A normal adult horse in a state of good hydration will secrete up to 10 gallons of saliva per day to help soften the food mass as it is chewed and swallowed.

If the appetite is affected and less feed is consumed, the horse might not consume enough energy to tolerate the cold weather. This may result in weight loss despite adequate nutrition.

The second, and potentially more harmful complication, is impaction colic or constipation. Both the feed material during digestion and the fecal contents after digestion must maintain adequate moisture levels. If they become drier, they are not moved along the intestinal tract in a timely manner and may cause an intestinal blockage (impaction).

Impactions do not only occur in the winter, but anytime a horse is drinking insufficient amounts of water to meet its requirements.

A horse will not become impacted in one day from decreased water consumption. The process usually happens over several days to several weeks.

If the horse becomes chronically dehydrated over a period of time, the body reserves are lowered and an impaction can occur.

One of the first signs of impending impaction is decreased manure production and/or drier feces. Owners should watch for signs that the horse is not eating well or becoming lethargic or that fecal changes have occurred. By encouraging increased water consumption, the owner may be able to prevent a colic.

If the impaction worsens, the horse will exhibit signs of pain, such as pawing, laying down and rolling. If they have not already done so, the horse owner should call a veterinarian. Early detection usually means the colic can be resolved without requiring surgery.

Regardless of season, weather conditions, or activity level, horses should have free choice, good quality water available at all times. If horses are given access to a tank or automatic waterer, consumption cannot be determined accurately.

Water consumption can be more easily monitored when horses are watered from a bucket in a stall. However, if only one bucket is hung, two waterings per day will provide only the minimum amount of water needed. Under these conditions, a horse should have an opportunity to drink more by hanging two buckets, especially if the horse is performing.

It is commonly thought that the best water temperature for horses is from 45 to 65 degrees, and that many horses will decrease consumption if the water is colder. This is thought to be especially true of horses 12 years of age or older whose teeth are sometimes more sensitive to cold water.

A study of water consumption by ponies during cold weather has indicated warming the water well above freezing temperature (closer to 90 degrees) resulted in approximately 40 percent more water consumed per day.

It is probably not necessary to greatly increase the water temperature for every horse, but it would be worthwhile for older horses, for horses whose consumption is below normal, or for horses that have a history of impaction.

Increasing salt intake will also stimulate a horse to drink more. The idle, adult 1,000-pound horse should be consuming about two ounces of salt per day.

Salt is added to commercial grain mixes, but the owner should offer additional free choice salt, as a block or as loose salt. The free-choice salt should also contain iodine, cobalt, and selenium, which are deficit in Michigan.

If water consumption is still less than desired, additional salt may be given to the horse by either adding it to the grain or as a salt slurry. A salt slurry is made by mixing one-ounce of regular white salt (table salt) with water in a syringe and administering it orally.

As long as free-choice water is available, consumption of additional salt will not result in health concerns.

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