## **Preventing Pre-Ride Dehydration**

ost riders would not start a ride with a lame horse. Even if they wanted to try, the vets would not allow the horse to start. On the other hand many riders, most unknowingly, start a ride with a partially dehydrated horse. Yet there is more and more evidence that pre-ride dehydration may be far more dangerous to the horse's ultimate welfare. This article provides steps that you can take to ensure your horse is fully hydrated and ready to go when the trail is open to competition.

Preventing dehydration or, better, positively maintaining proper hydration is both an art and a science. These must be tailored to the individual equine. The ideal endurance horse follows the motto "drink early, drink often." So you must know your horse and proper techniques to tell how well hydrated your horse really is. Quite frankly, finicky drinkers may simply not be well suited for the sport.

So first, you must learn how to monitor your horse in training. You should measure hydration the same way the vets do. You should inspect these hydration factors before, during and after your training rides.

From the Veterinary Considerations chapter of the AERC Rider's Handbook, which is online at www.aerc.org, here is how to check the horse's hydration status:

- ✓ The hydration of the horse is checked by looking at the mucous membranes, capillary refill time, jugular vein refill time, skin elasticity and listening to the gut sounds. Proper evaluation of the hydration factors requires considerable experience, as individual horses do show variation. Changes from the baseline for a horse are significant because often dehydration is present before these parameters change. Riders should know their own horses' baseline parameters. Get experienced riders and vets to help you learn how to check these factors.
- ✓ The skin pinch is one method of determining hydration. It is performed by pinching the horse's skin with the thumb and forefinger over the point of the shoulder (not over the neck). In a fully hydrated young horse, the skin will pop back immediately. As the horse becomes progressively more dehydrated, the skin will stay puckered up for progressively longer periods. You should know the normal for your horse.

- ✓ A capillary refill test is performed by applying thumb pressure to the gums, removing the thumb, and then observing the time it takes for the blanched area to return to the same color as the surrounding membrane. This test indicates the ability of the heart to replenish its capillary system, and is a very important tool in assessing metabolic conditions. Recovery normally takes less than two seconds at the pre-ride exam. Capillary refill time should ideally be one to two seconds. Again, know your horse.
- ✓ The mucous membranes that are observable are those of the inner eyelids and gums. Pink moist gums indicate proper blood perfusion of the tissue. Normal mucous membranes can vary in color from pale pink to yellowish. Abnormal variations include reddish injection, mottled appearance, brick red color, and shades of purple. Changes from the base line are considered significant.
- ✓ The jugular vein refill time is taken by briefly occluding the jugular vein and observing the time it takes to refill (typically about a second). Dehydration slows the time it takes for the vein to fill.
- ✓ Gut sounds are heard in the flank and abdominal areas. These sounds are graded after listening to the upper and lower area of the flank on both sides. Listen to these sounds with a stethoscope to train yourself. Gut sounds that are reduced from normal can be a sign of dehydration.

So how do you make sure your horse arrives at the starting line well hydrated and ready to go?

First, always make sure your horse has unlimited access to fresh water at home as well as access to a salt block and/or loose salt.

Next, if necessary, teach your horse to drink well on the trail during training rides. While some horses do this naturally and come from a gallop to a sudden stop to sip from an awful looking mud puddle, others need to train with horses that drink well to get the idea. You may have to wait several minutes at a water hole for the horse to drink. Some riders will get off and loosen the girth to let the horse know that it is okay to drink.

Always give your horse two or three days of very light exercise or rest before a ride so that your horse starts the trip to the ride at his best—not exhausted from eleventh-hour conditioning efforts. Never make the mistake of overriding your horse the week before a competition.

Next, keep the horse well hydrated during trailering. Many riders like to give a dose of electrolytes before leaving home to encourage the horse to drink the fresh water that you should offer at least every four hours. Because many horse are not eager to drink while traveling, consider offering the horse a really wet, sloppy slurry of well-soaked beet pulp or chopped bagged forage. In fact giving the horse a choice of a couple of slurries

is even better as we have found the horses like variety.

If you are going to be traveling more than four hours to the ride, we recommend getting the horses off the trailer every four hours or so to stretch their legs, drop their heads, pee, take a drink if willing, and eat a slurry. At least stop the trailer for 15 minutes or so and offer the horse that water and slurry. If there is grass when you get the horse off the trailer, hand graze the horse. Also, remember that you never try something new just before a ride. So of course you have been feeding the slurries to the horse for at least three weeks before the ride on a regular basis. Note that it takes about three weeks for an equine digestive system to develop the proper bacteria for a new feed!

Several studies have demonstrated that trailering is stressful and dehydrating to the horse, particularly in hot weather. Horses can lose 4% to 6% of their body weight subsequent to long distance transport. Keep the horses as cool as possible by providing maximum ventilation and sponging the horse at stops in periods of high heat and humidity. Ask the horse if it prefers one of those "fancy trailers with all the trimmings" or a nice open stock trailer and I'll bet the answer is the stock trailer.

Once you arrive at the ride site, check the horse's hydration level. Offer fresh water. Administer a dose of electrolytes and/or offer loose salt to create thirst. Hand graze the horse on grass if available if the horse is used to it. Offer damp hay.

Provide the horse with shade and a breeze in really hot weather if possible. Also provide cooling soaks and sponging.

If the ride provides a scale to weigh your horse (this is common, for example, at rides in the Southeast Region where a horse scale moves from ride to ride), weigh your horse, record the weight, and then track the weight before, during, and after the ride.

If the horse is finicky about water, bring some from home. Another trick that this author has never tried, but has been told about by veterans, is to put a little cider vinegar in the water at home so the horse becomes accustomed to the taste and smell. Then add a little cider vinegar to water at the ride site to disguise any strange smell or taste.

Also, make sure the horse has arrived at the ride site with plenty of time for recovery. For a 25 or 50 mile ride only a couple of hours from home, this may mean as little as half a day before the start. For a 100 mile ride more than a few hours from home, the horse should have at least a full day to recover. In the extreme case of the Pan American Championships where the East Time Zone had to travel across the country, the horses were given a week or more to recover after transport prior to competition.

More and more research shows that the horses that maintain normal weight, hydration levels, and electrolyte balance during a ride perform the best and look the "fittest to continue." To do that you must start with a properly hydrated horse. If you horse is not properly hydrated, do the same thing you would do if the horse is lame: don't start; wait for a better day. If you and your horse are well hydrated the "trail is open"!

-Stagg Newman, Education Committee Co-Chair