

Managing Metabolics

Queensland can experience wild weather events, from extreme heat and humidity, to thunderstorms and cold nights. The challenge of riding a horse in a long distance event becomes even more challenging when coping with adverse weather conditions. Therefore, adequate conditioning prior to a ride, careful management leading up to, continuous monitoring during and a good recovery after a ride is required to ensure a successful completion and a happy and healthy horse for many years to come.

What is involved in the veterinary metabolic profile?

Many parameters are assessed by the veterinarian during the vet checks and the total clinical picture is used to determine the overall status of a horse. The factors assessed include heart rate, mucous membranes, skin recoil, capillary and jugular refill, gut sounds, and muscle tone. Many of these measurements can be easily checked by a rider during an event, and the more you check it, the more you'll notice subtle changes.

Heart Rate:- Counted over 60 seconds. The heart rate and recovery and the time taken for recovery can indicate how a horse is coping with the conditions. Previous recoveries and a horse's average heart rates can be used as indicators. The Cardiac Recovery Index, CRI, is also used during vet-gate-into-hold rides and is used to assess how a horse is coping and its recovery.

Mucous Membranes:- Assessed for colour and moisture, should be a nice pale pink colour. Colours such as blue/purple or red/orange are signs of severe metabolic disturbance. The gums should be soft and moist.

Skin Recoil:- Assessed at the point of the shoulder in seconds. Normal 1-2 secs, mild dehydration 3 secs, moderate dehydration 4 secs. Occasionally affected by hair coat length, or wetness of coat or individual variation.

Capillary and jugular refill:- Assessed by blanching the colour out of the mucous membranes and counting the seconds it takes for the colour to return to normal. The jugular vein is tested for the number of seconds it takes for the jugular to fill with blood.

Gut sounds:- Listening to gut sounds in all four quadrants is recommended to gauge the horses metabolic status; left side is mostly small intestinal sounds, right side is generally large intestines and ileocaecal (a special valve) sounds (a large gurgle generally heard 1-2 times per minute).

Muscle tone:- Used to assess for any evidence of muscle tightness, or tying up.

What can I do at home?

Home is the best place to get to know your horse, know what he/she likes, if they are a picky eater or a guzzle guts. Listen to the heart rate and monitor recoveries after training rides, particularly the higher

intensity training sessions. Listen to gut sounds (you'll be amazed how much you can gauge, the more you listen to normal, the more you'll be able to figure out if they are quiet).

Manage your horse's general health at home, such as diet, worming, dental health and vaccinations. Consult with your veterinarian on general health advice, as each horse is an individual. Diets with adequate calcium and phosphorus (but not too much calcium), can allow the horse to be more able to draw on its calcium reserves in the bones during a ride. Lucerne hay is quite high in calcium. Therefore it is best avoided on a day to day basis, but rather reserved as an enticement during hold periods at rides.

What can I do leading up to a ride?

Ensure your horse eats well leading up to a ride. Ensure the travel is smooth and as comfortable as possible. If you can, take the horse off the transport every 4 hours to allow it to walk and place its head on the ground. Feeding and preloading with forage (such as grassy hay) creates a reserve of food and water in the hindgut which the horse can draw on during the ride to assist with maintaining its metabolic parameters.

What can I do at a ride?

Keep a close eye on the water and food intake. Ensure the horse is travelling well. Strapping and cooling a horse particularly in hot and humid weather (even if it is raining) goes a long way to ensuring the blood flow can red divert from the muscles and skin to the gut, thereby helping with gut sounds and metabolic recovery. Often ice water may be required, particularly in humid weather. The horse has difficulty sweating and constant cooling may be required (even during the hold periods). Another good idea is to strap the horse just prior to leaving on the next loop. Carrying a sponge or dipper can assist with cooling during the ride and many rides have dedicated water available for on course strapping (of course don't strap out of the main horse water buckets).

Rectal temperature can be used during a ride and during hold periods to ensure the horse is being cooled adequately. If the horse is not cooled adequately then it will not feel like eating. Think of yourself after a big run, or even after a loop at a TADRA ride. Food is generally not the first thing you think of off track, with adrenaline pumping. Usually, it isn't until after you finish the loop and vet in and can relax a little, that you might think of having a snack. This is the same for your horse.

Feeding during a ride will vary depending on the individual horse, but in general a smorgasbord is the way to go; plenty of normal hard/mixed feed, a variety of grassy and lucerne hays and a combination of some sweet feeds and molasses can entice a horse's appetite during a ride.

Electrolytes can be used during the event. There are many different versions available, with differing uses. Those which come in liquid form are generally just that (mostly water) and a waste of time. Those with bicarbonate in them are not warranted for endurance horses as this will make the metabolic profile worse (more alkaline). Good quality electrolytes contain adequate amounts of sodium, potassium, chloride, magnesium and calcium. KER Endura Max has a few different types of calcium to allow it to be more available during a ride, and the paste format has the added benefit of having a buffer to help

relieve the stomach from the effects of a large volume of salt (particularly if ulcers are present). Many other electrolyte mixes are available. The main thing is to do your research and look at the ingredient list and quantities.

Take note of any subtle changes a horse has during a ride, such as reluctance to go up hills, or not eating or drinking as much as usual. Take note of the recoveries. If the heart rate is taking longer to recover than normal, then you need to address the situation and think about your ride. Consider withdrawing, or changing your ride plan. The plan may go from a moderate pace, to a slow pace and allowing the horse to graze and allowing plenty of time at water points for drinking and strapping if available. The person in the best position to know and manage the horse during a ride is the rider (with help and advice from strappers, owners, trainers and of course the veterinary team). If there are any issues during a ride, do not hesitate to seek advice from the veterinary team, or seek clarification if you are unsure of why the horse is scoring low in metabolic parameters during events.

What can I do after a ride?

After a ride, ensure your horse has plenty of access to fresh water and forage. Allow for 2-3 times the normal amount of water for your horse, as they will need to recover their water balance over a few days post-ride. Ensure you continue to strap and cool the horse if required, particularly if you are finishing in the heat of the day. Allow enough rest and recovery for the muscles and joints and then gradually build the exercise programme up again. A good gauge is one day of rest per 10kms of ride, excluding slow walking rides to loosen the cobweb), but again every horse is different. Now it's time to get ready for the next big adventure whether it be a social picnic, exploration trail ride, the next TADRA event.

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