

# You Can Lead a Horse to Water

with **Dr Paula Williams**  
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Paula qualified in the UK in 1993 and has been an equine veterinarian since then. She completed an internship at Rossdale and Partners in Newmarket, UK and has subsequently

worked in equine hospitals both in the UK and Australia. Paula is currently an equine practitioner at WestVETS Animal Hospitals in Queensland.

Her clinical interests include diagnostic imaging, the investigation and management of musculoskeletal issues in the equine athlete, the equine foot, neonatology and internal medicine.

**A**ll horses must have access to clean drinking water 24 hours a day so that there is no risk of them not getting enough to drink and becoming dehydrated.

The essential nutrients in a horse's diet are carbohydrates, protein, fat, vitamins, minerals and water. Here we are going to look at the very essential **water**, especially as we head into the heat of an Australian summer.

## Facts

- > Water makes up 65–75% of a horse's body weight.
- > A horse that has no feed but has water can survive for up to 25 days. A horse deprived of water may only live up to 2 to 6 days.



Always supply water free from contaminants.  
Photo: Rachel Baker.

## What type of water?

It is a no brainer that the water consumed by horses needs to be clean and not contaminated. It is therefore absolutely crucial that the water source is checked daily for contamination/pollution from algae, manure, urine, dead animals, stagnation and rotting feed. The presence of contamination may make the horse ill. Contamination will also affect the smell and taste of the water and given that horses have very good senses of smell and taste and if the water isn't to their liking they may refuse to drink.

## How much water does my horse need?

**An average 500 kilogram horse drinks around 20 – 50 litres a day.**

The volume consumed varies depending on several different factors:

- > **Weather** – the high temperatures and humidity seen in the summer months increase water requirement. In winter, some horses may drink more if they are on high fibre diets with less moisture content.
- > **Exercise** – causing sweating.
- > **Lactating mare** – producing large volumes of milk and require water to do so. Studies have shown that lactating mares require 1.8 - 3 times the amount of water that average horses require. It is a huge requirement!
- > **Feed** – horses on dry feed will drink more, those on wet feed will drink less. Fresh pasture with green grass has a high water content (60 – 80% moisture) compared to concentrates and baled hay which have less moisture.
- > **Travel/competing** – increases requirements.

- > **Individual variation** – like people, some horses will drink more than others.
- > **Underlying health issues** – for example diarrhoea, some respiratory conditions, kidney disease, Cushing's disease and equine metabolic syndrome may influence a horse's water intake.

## Why does a horse need so much water?

There are two main reasons why horses require a high volume of water:

### 1 High fibre diet

Horses naturally are free range trickle feeders and have a high fibre diet and require water for the gastrointestinal tract to be able to digest that fibre and to keep it moving.

### 2 Sweating

Horses (like humans) rely on sweating to thermoregulate and in particular to cool themselves down. This requires large volumes of water and therefore in conditions where horses sweat more (high temperatures, humidity and exercise) their water requirements will increase. Sweating also causes loss of important electrolytes particularly sodium, chloride, potassium, calcium and magnesium.

**Fun fact – top level endurance horses in hot humid conditions have recorded sweat losses of up to 60 litres a day and eventers going cross country may lose around 20 litres.**

## Know your horse's normal water intake.

It is a good idea to have some idea what your horse's normal water intake is so that you can recognise an issue promptly and act accordingly.

An individually stabled or paddocked horse with buckets is easy to monitor, however, horses in a herd environment or with automatic watering systems or natural water sources such as dams or rivers are more difficult to monitor. In this circumstance it is important to ensure that there are multiple water points to allow for herd dynamics.

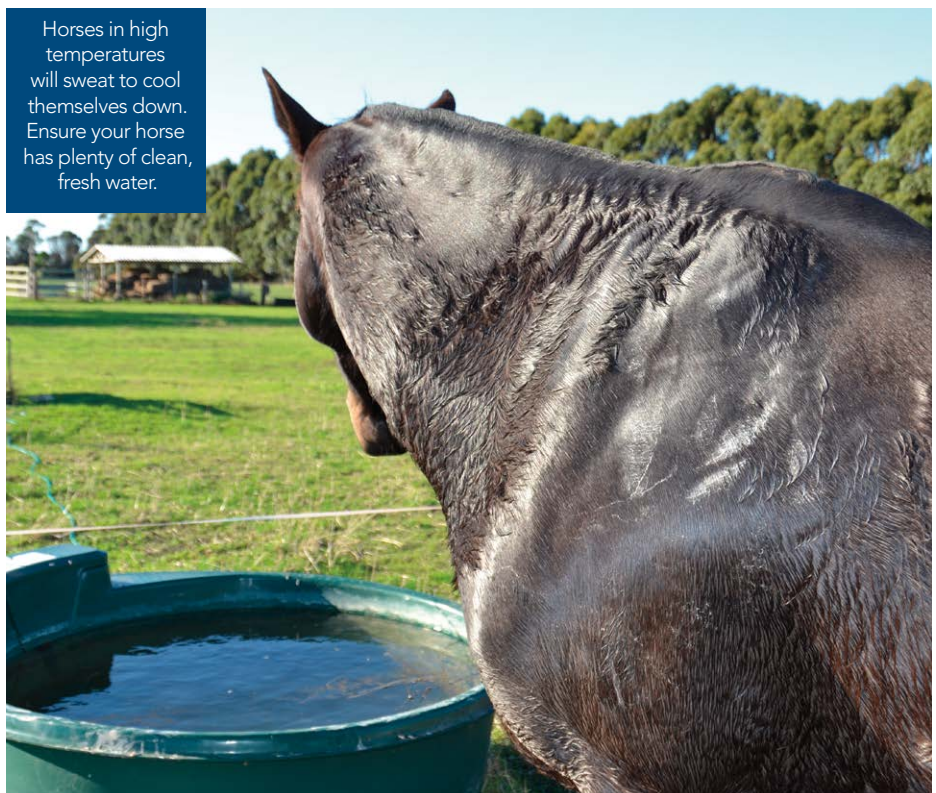
When a horse is new to a property or travelled to a competition, the water may taste and smell different even when it is clean. Water intake should be monitored very carefully in these circumstances.

## How can I assess my horse's hydration status?

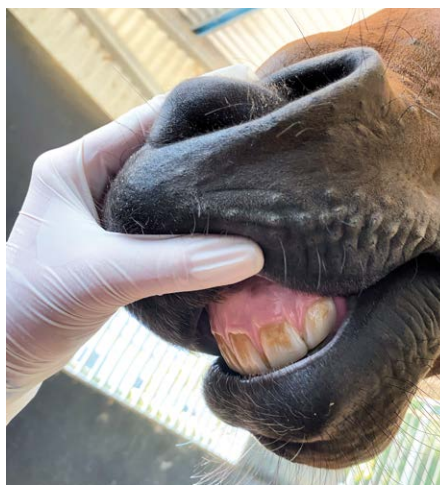
The hydration status of a horse can be fairly easily evaluated:

### > Check the gums

They should be pale pink and moist



Horses in high temperatures will sweat to cool themselves down. Ensure your horse has plenty of clean, fresh water.



Check gums are pink and moist.

### > Skin tent

Pinch a small area on the neck or shoulder. In a hydrated horse this will "snap" back quickly but in a dehydrated horse stays prominent. This may not be so accurate in foals, older horses or in horses with certain skin conditions but is a quick and easy test.

### > Normal faeces

Healthy horse poop should be neat, firm balls with a nice glossy shine, they should break up easily. If your horse's manure is dry, dull or hard then they may be dehydrated.



Check the consistency of faeces.



Perform a skin pinch test to check for dehydration. Photo: Rachel Baker.



Sweating is one of the reasons horses have such a high water requirement. Photo: Audrey Hudson / Getty Images.

“Water makes up 65–75% of a horse’s body weight.”

➤ **Normal urine**

Your horse should urinate five to six times a day with a normal stream lasting about 30 seconds.

**Fun fact – a 500 kilogram should urinate 8 - 15L a day.**

Normal urine should be pale in colour and not be too smelly, sometimes horse urine is a little cloudy due to calcium in the urine and sometimes it may be foamy due to the presence of mucus. If your horse’s urine is dark yellow, smells pungent and in lower volumes then it may indicate that your horse is dehydrated.

➤ **Other signs** – dull/sunken eyes, lethargy, dry skin, tucked up flanks, depression and thick saliva.

**Electrolytes are also important**

As mentioned earlier, sweating is one of the reasons horses have such a high water requirement. Electrolytes are also lost in sweat especially sodium, chloride, potassium, calcium and magnesium. Horses naturally get these electrolytes in their feed with a forage based diet being an adequate source for most. Under normal conditions and work levels you only need to provide salt which can be as a salt lick as horses are happy to select themselves. Alternatively add a tablespoon of salt daily to their diet.

If horses are in a high level of work and in high temperatures and humidity, they will sweat more and have an increased requirement for electrolytes. There are many supplements available for electrolyte replacements. If you have concerns about supplementing electrolytes, you can discuss such with your equine veterinarian or an equine nutritionist.

**What happens if my horse’s water intake is inadequate?**

The lack of water consumption is an extremely serious concern and can lead to various conditions some of which are life threatening:

- ➊ **Poor performance**  
Given the high requirement of horses for water, even mildly dehydrated horses will not perform well. The horses are more easily fatigued and their muscle and nerve function is compromised.
- ➋ **Reduced appetite**
- ➌ **Weakness**
- ➍ **Myopathy/tying up/equine rhabdomyolysis/azoturia**  
This is a whole separate subject but essentially is a condition of the muscles leading to general stiffness and in some cases serious muscular and kidney compromise.
- ➎ **Thumps – diaphragmatic flutter**  
This is another condition due

to dehydration and electrolyte imbalances where the diaphragm goes into a spasm.

➏ **Colic**

This is a “biggie” given the requirement of the horse gastrointestinal tract for water. It can be life threatening as a consequence. Colic means abdominal pain and can have many causes; dehydration can lead to colic as a result of motility issues and in severe cases impactions.

In an impaction colic, dehydrated food material becomes stuck at the various narrowings that are present in the gastrointestinal system. The most common location is the pelvic flexure of the large colon where not only does the bowel narrow, it also does a 180 degree turn.

Management of dehydration colic varies from rehydration (either via stomach tube or intravenous fluids) and pain relief to in severe cases surgery.

**What can I do to ensure my horse is getting enough water?**

There are many ways to ensure horses are drinking enough water and these include:

➤ **Know your horse and their drinking habits** – monitor their hydration status and water intake.

“If horses are in a high level of work and in high temperatures and humidity, they will sweat more and have an increased requirement for electrolytes.”

➤ **Be aware of circumstances where water intake may need to increase**

and ensure that your horse is receiving adequate.

➤ **Ensure water is available at all times.**

Do not withhold water from horses. There however, may be times where water needs to be withheld for certain veterinary procedures (for example gastroscopy and some surgical procedures) — your veterinarian will guide you if this is the case.

➤ **Ensure water is clean and fresh**

Water sources must be checked daily to ensure adequate supply. Check that automatic waterers are filling properly. Replace water if it becomes contaminated. Clean water vessels such as buckets, trough and bath tubs to avoid contamination. If natural sources are used then ensure that the source is not polluted or has algae. If natural water sources are used then ensure there is an alternative.

➤ **Easy access to natural water sources**

If dams, streams or rivers are being used as a water source then ensure that the access is easy especially for the older or weak horse — this particularly is the case when conditions are muddy or icy.

➤ **Be aware of herd dynamics**

Sometimes horses may be low down in the pecking order and chased away from water sources — it is therefore important to ensure that these horses have a secondary source to go to. Essentially in a herd situation there should be multiple sources of water.

➤ **Travel/competition**

Take your home water with you as some horses may not drink new water, alternatively try flavouring the water.

➤ **Encourage drinking**

Some horses are poor drinkers and may need some encouragement. Some horses may prefer tepid or warmer water in winter months so this should be offered especially if water sources

are getting icy. Conversely in summer, horses may also prefer tepid water rather than chilled. Some horses prefer flavoured water — molasses, apple juice or commercial water flavours can be used — be sure to offer plain water as an option too. Pieces of apple or carrot floating in water may also encourage these horses. If your horse has equine metabolic syndrome then seek veterinary advice before using molasses.

➤ **Hang salt licks** in the paddock and stable.

➤ **Consider electrolytes**

Electrolytes are not a replacement for adequate hydration but may be required in horses sweating profusely with exercise and hot conditions or when being travelled.

## Summary

Water is an essential nutrient for horses and they require a large volume because of their digestive processes and sweating. Dehydration can lead to life threatening conditions so it is extremely important to ensure your horse is well hydrated and drinking adequate amounts. If you have concerns about your horse's drinking or hydration please contact your veterinarian for advice. ↻