

# TESTING YOUR HORSES' URINE PH



We have observed that there is a correlation between the horse's urine pH and their overall health and behaviour. The pH scale goes from 0 which is extremely acidic to 14 which is extremely alkaline. Neutral is 7.

The horses with the best health and (calm) behaviour have a pH the same as ours - around 7 which is neutral. The higher the number, the more alkaline and the lower the number the more acidic.

The pH in the horse's hindgut is generally 6.5 to 7, where good microorganisms can thrive. These bacteria are essential to aid digestion. However, if the pH drops below this it can cause hind-gut acidosis.

Testing the pH of your horse's manure with pH strips may help to diagnose hindgut acidosis. This can in turn enable treatment before severe disorders develop.

Your horse's urine pH is indicative of his blood and body fluid pH.

Horses suspected of suffering from Hind Gut Acidosis meaning their system is too acidic (from eating high grain/carbohydrate/sugar diets), often exhibit symptoms and the urine pH of those with the exact opposite – alkalosis.

In our experience, horses with the following issues tend to have a urine pH over 8 (alkalosis)

1. Head flicking
2. Twitchy
3. Over-Reactive and seriously spooky
4. Tight Behind
5. High Headed

## **How to test your horse's urine -**

Carry the pH test strips around in your pocket when around your horse and when you happen to see your horse urinate, press the strip into the wet grass or puddle.

Do not try to get it mid-stream as this will often cause them to shut off!

Compare the colour with the chart. Ideally it should be close to 7.

## **Checking results -**

If the urine pH is over 8, then some dietary adjustments are required. Try to reduce the potassium and nitrogen load on the horse's system.

- Drastically reducing green grass intake and upping the hay'. If this is a problem, then steps 2 and 3 are more important.
- Checking to see if there is much clover in the paddock. Making sure there is no lucerne, soy-bean meal, kelp, or added potassium in feeds you are currently feeding. This means checking the back of the bag, looking down the list and seeing if there is potassium added.
- Then make sure you are adding salt to the feeds and if it is still too high then up the GrazeEzy as this is what it is designed for, it contains multiple 'buffers' which help the pH come down and you will find that they return to normal.

If the urine pH is below 6 (too acidic) then the horse is liable to be dull, lethargic, nappy, and have 'no go'. Ensure you are feeding salt and modify the diet to help prevent or correct possible hind-gut issues.

# TESTING YOUR DOG AND CATS' URINE PH



The pH scale runs from 0 (acidic) to 14 (alkaline), with 7 being neutral.

Healthy dogs and cats generally fall between pH 6.0 - 7.5, though this varies with diet, time of day, stress and hydration.

## Cats – Ideal pH

- Typical healthy range: 6.0 – 6.5 (slightly acidic).
- Raw/fresh diets: often 5.8 – 6.4 due to natural moisture and higher protein.
- Kibble diets: often 6.8 – 8.0, more alkaline and concentrated.

## Dogs – Ideal pH

- Healthy general range: 6.0 – 7.0.
- Raw diets: commonly 5.8 – 6.4, slightly acidic.
- Kibble diets: may produce more alkaline urine (7.0 – 8.0) in some dogs due to carbohydrates and low moisture.

## Crystals & Stones

### Struvite (Magnesium-Ammonium-Phosphate)

- Risk increases when urine pH is above 7.0 (alkaline).
- In dogs, UTIs can also raise pH and contribute to struvite formation.

### Calcium Oxalate

- Forms in acidic urine below pH 6.0.
- Risk is related to chronic over-acidification, genetics, and urine concentration, not just diet type.

## Hydration Matters

Fresh/raw food naturally contains 60 - 70% moisture, supporting dilute urine and reducing both struvite and oxalate risk.

## How to Test Urine pH

### For Dogs -

- Take pH strips on a walk.
- When your dog urinates, dip the strip in the fresh wet patch on the ground.
- No need to place the strip in the urine stream.

### For Cats -

- Place baking paper or non-absorbent litter in the tray to catch a small sample.
- Test immediately for best accuracy.

## Checking Results -

- Test a few times daily at first to find your pet's average range.
- For pets with urinary issues, daily testing during diet changes can be useful.
- Always interpret pH alongside veterinary urinalysis (specific gravity, crystals, infection).