

HAYGAIN EXAMINE A NUMBER OF COMMON HEALTH CONSIDERATIONS FOR HORSES DURING WINTER TIME AND EXPLAIN THE STEPS OWNERS CAN TAKE TO MAKE SURE THEIR HORSES STAY HEALTHY AND AVOID COMPLICATIONS.

WINTER HORSECARE ADVICE *with Haygain*

There is a misconception among some horse owners that they only need to worry about keeping their horse hydrated in the summer, when exercise in the sun and heat throughout the day can cause sweating and dehydration.

Paying attention to how much water your horse consumes in the warmer months, and providing electrolytes where necessary is crucial, but ensuring they are well hydrated is equally important in the winter too.

DEHYDRATION Why do horses become dehydrated during the colder months?

During the winter, a horse's access to grass will be limited as grass growth slows and they are highly likely to spend more time stabled and being fed dried, stored forage. Dried forage, as the name suggests, contains less moisture than grass, so the animal is immediately losing

some of the water from it's diet. In addition to this, horses find drinking extremely cold water, sometimes partially frozen, far less inviting than they do the rest of the year and so they avoid drinking as much water as they actually need to.

Horses who are badly dehydrated can suffer from fatigue, kidney failure and a host of other serious complications, but even mild dehydration can lead to more serious issues. Impaction colic, where food clumps together and blocks part of the horse's intestines, can be triggered by the animal being dehydrated.

How do I know if my horse isn't getting enough water?

It is important to note that prevention is far better than a cure – a horse has to have lost 5% of their body weight before any visible outward signs occur (these could be sunken eyes,

skin tenting or fatigue), so don't wait to see signs that there is a problem before making stable management changes. A healthy horse should drink between 6.5 and 9 gallons of water every day, so a good place to start is to monitor how much your horse is drinking each day. The fact that horses are often stabled more in winter makes it easier to monitor how much water they are drinking, unless you have automatic drinkers of course.

How can you ensure your horse stays



hydrated in winter?

If your horse undertakes strenuous exercise during the winter, feeding electrolytes in the same way as you would in summer will be necessary to ensure you are replacing essential blood salts lost in sweat. Equines sweat slightly differently to humans, and as a result they don't get such an immediate 'thirst trigger' during or after exercise in the same way we do. Perhaps that's where the old saying 'you can't make it drink' comes from, but it does add another important reason to the list of why owners need to ensure horses have every opportunity to stay hydrated.

Ensure there is always a plentiful supply of clean water, and make sure drinkers, troughs and buckets are kept clean. The same chores that we carry out in the summer are considerably less attractive in the winter, leading to dedicated horse owners having frozen hands, but they do still need to be addressed! Some owners have found that adding apple juice or some mint leaves to the water can aid its palatability but make sure you always offer 'plain' fresh water alongside this, in case your equine objects to fruity flavours in their water.

Research has shown that horses are less inclined to drink cold water, so in the winter ensuring you have access to water heaters may be a good investment to help keep them drinking as much as possible. Owners of geriatric horses who could be suffering from sore or broken teeth should be aware that their

SOAKING VERSUS STEAMING HAY >>>

horse will find drinking very cold water uncomfortable and could consider providing a bucket of slightly warmer water for them to drink from.

As we mentioned a little earlier in this piece, what you feed your horse in winter will also impact their levels of hydration. If you provide hard feeds then add some water to each bucket – it may not be much, but every little will help. Steaming hay also adds moisture into the forage. Studies have found that steaming increases the water content of hay by three-times, from 8% to 23%, demonstrating just how much moisture is added to the forage which will then be fed to the horse.

Soaking hay or wetting it down with a hose are cheap and easy ways to remove respirable particles of dust (anything that the horse will breathe in when it is eating it), but these methods do have side effects on the hay which can in turn cause other health issues.

Respirable Particles

Steaming reduces particles found in hay (dust, mould, bacteria and other microbes breathed in by the horse) by 98%, soaking dampens down 90% of respirable particles. See more overleaf.

Bacterial Content

Soaking dramatically increases the bacterial content of hay – a 10-minute soak will see bacteria increase by 150%, severely impacting the hygiene quality of the hay. However steaming reduces the bacteria levels in hay by up to 99%, meaning it is all but free from harmful microbes.

Palatability

Steamed hay is highly palatable, making it ideal for fussy eaters, horses recovering from surgery and those who require hay of a lower nutritional

value, whereas several studies have shown that soaking reduces the palatability of hay – particularly when forage is soaked overnight.

Nutritional Value

Soaking leaches nutrients out of hay, reducing its mineral and protein levels. Steaming has no effect whatsoever on the nutritional quality of hay, so is perfect for sport horses who need energy from food.

Environmental Impact

Soaking a bale of hay uses between 60-100 litres of water, whereas steaming the same volume of forage will only use 4 litres of water. Steaming also produces no toxic outflows, but water left behind after soaking hay can be 9 times more polluting than raw sewage.

Labour

Hay is very heavy and unwieldy after it has been soaked and moving a bale of soaked hay even in a sturdy wheelbarrow can be hard work. Steamed hay is clean to handle and there is no difference in weight versus untreated hay.

Clean hay means healthier horses

Study shows feeding Haygain steamed hay reduced the risk of Inflammatory Airway Disease (IAD) by 63%

Recent research by Dr Dauvillier and Dr van Erck-Westergren found 84% of the 482 horses referred to their clinic for a health check, poor performance or respiratory issues were suffering from IAD.

Various types of bedding and forage were investigated as risk factors for IAD (dry hay, soaked hay, and haylage, straw and shavings). Only Haygain steamed hay significantly reduced the risk.

The research revealed feeding Haygain steamed hay reduced the occurrence of IAD by almost **two thirds**.

That's pure horse sense



www.haygain.co.uk

HAYGAIN

References: Dauvillier, J. and Westergren, E. "The Prevalence of Fungi in Respiratory Samples of Horses with Inflammatory Disease" (2016) Proceedings of the Annual ACVIM Conference, 2016 - Dauvillier, J. and Westergren, E. "Fréquence des moisissures dans les prélèvements respiratoires des chevaux atteints d'IAD" (2017) Journées de la Recherche Equine.

INSULIN-RESISTANT HORSE >>>

Horses can become insulin-resistant for a range of reasons including obesity, metabolic syndrome, equine Cushing's disease, and can be insulin sensitive due to polysaccharide storage myopathy (PSSM).

Owners of insulin-resistant horses face a tricky conundrum – they need to limit the levels of non-structural carbohydrates (NSCs) in their horse's feed to lower the risk of complications such as laminitis but also know that horses have evolved as trickle-feeders. In an ideal world their horses would be able to browse for and consume lower-quality grass-based forage all day long without the risk of high sugar and carbohydrate levels.

Good quality hay can present a problem for insulin-resistant or sensitive horses, and some owners turn to soaking to make it more suitable. Soaking removes water soluble carbohydrates (WSCs) and NCS from hay, and the longer it is soaked for the more of these nutrients you remove.

Recent research has looked at the effects of steaming on NSCs in hay, to see if this could take the place of soaking hay.

In order to be safely 'free-fed' to insulin-resistant horses, hay should have an NSC level of less than 10%. The results of this study showed that while soaking still remains the most effective method for lowering the levels of NSCs in hay, steaming it also had an impact. Soaked hay reduced the levels of NSCs versus those seen in the dry

hay by 16.8%, and steaming reduced them by 7.2%. The hay in the study had a very high level

of NSCs to begin with (20.8%), so in this case none of the hay (soaked, steamed or dry), would have been suitable for an insulin-resistant horse.

A different study looked at the hay 'as-sampled' instead of dry, which considers the moisture levels of the hay when it is being used in a realistic stable environment. In this study, the NSC levels in steamed hay were within the limits acceptable to be free-fed to insulin-resistant horses. Both studies showed that the steamed hay retained important minerals, bar iron which actually contributes to insulin resistance. Steaming also mitigates the other negative outcomes from soaking such as increase in bacteria levels and decreased palatability as discussed on the previous page.

Horse owners looking for an easy way to lower NSC levels in hay for their insulin-resistant horse whilst ensuring that it remains palatable and safe, should soak first and then steam recommend researchers¹. This is the most effective method to produce a low-calorie clean, safe hay.



1. Moore-Colyer MJS, Lumbis K, Longland AC, Harris PA

RESPIRABLE DUST IN STABLES >>>

Keeping horses indoors is a normal part of modern stable management, but it's not always the most natural nor the healthiest choice for the horse.

The levels of respirable dust are far higher in a stable than they

ever will be in the open air and this can have an immediate impact on respiratory health, so if a horse has to be stabled it is important to minimise the exposure to dust.

In order to limit a horse's exposure to dust, it is necessary

to measure where stable dust is coming from and when dust levels are at their highest.

Multiple studies have shown that respirable dust levels are affected by the choice of bedding, the forage that is fed and the stable management activities that are carried out. For example, various common horse care activities can raise the levels of respirable particles in the stable including mucking out, adding new bedding and sweeping the floor. The dust levels measured in the daytime were twice as high as night-time levels, showing that stable management activity has an enormous impact on the amount of dust in the air and

therefore that the horses are breathing in. Therefore, if it is possible, it is wise to remove horses from a stable when mucking out and sweeping is taking place.

While all the contributory factors listed above have an impact on the horse's respiratory health, it is important to be able to measure exactly what is in the horse's breathing zone, the air the horse takes in with every breath. Researchers have used cyclone personal air samplers to measure the dust particles in a horse's breathing zone as it goes about its normal daily routine in the stable. The results of these studies showed that, while the choice of bedding is important



Event rider Georgie Spence has joined horse health experts Haygain as a supported rider.

Georgie has been using the Haygain products for some time and relies on their patented technology to ensure her horses feel their best for their International and top level competition.

"Team Spence will be working closely with Haygain to ensure the horses stay happy and healthy. We have been using Haygain for nearly two years now so it's great to receive advice and support from a company we already value so highly!" Haygain are well known for their products that support horse health, Their collection includes steamers ranging from £695 to £2,845, as well as the Slow Feeder Forager, their sealed, one piece ComfortStall flooring system and the Flexineb Nebuliser. www.haygain.co.uk



when you are trying to reduce dust levels in the stable, it was actually the feed chosen that impacted the quality of the air breathed in by a horse most of all. In addition, even if the stable is incredibly well-ventilated, any dust present in forage will be breathed in as the horse selects and eats their food. Using a Haygain Steamer to treat hay before it is fed lowers the dust in a horse's personal breathing zone by 99%, ensuring the horse can eat for hours on end without risk of respiratory disease. In addition, while American-style barns have other benefits for horse health and stable management, they were worse

for respiratory health than traditional stable blocks where each horse has its own individual space when the dust in the horses' breathing zone was tested. The ideal combination for promoting good respiratory health is for a horse to be bedded on good quality wood shavings, in an individual stable and fed steamed hay.

HAYGAIN LAUNCH 'TRY BEFORE YOU BUY' SCHEME

Science-driven horse health specialists Haygain have launched an innovative scheme giving riders and owners the chance to trial their patented forage steamers before committing to the purchase.

The scheme is available with the following conditions; The HGOne (pictured) RRP £649 is perfect for single horse ownership. Pay a trial fee of just £100 and a refundable deposit of £200 to test the steamer for 2 weeks. Should you decide you don't wish to commit to the purchase, be sure to arrange collection of the steamer, returning in all original packaging. Shipping and collection is free. Other sizes available on request. Should you wish to keep the steamer, simply pay the outstanding amount (£349) to continue using and to purchase the product. www.haygain.co.uk/pages/try-before-you-buy.



Product News...

Oxygen is taken into the body through the lungs and then transported through a network of blood vessels to the muscles. As exercise increases so does the pressure on these two systems which becomes even greater when the horse is asked to gallop or jump fences. **Bleeder Gard Powder** helps to support these vital structures and should be fed daily to horses in strenuous training and competition and 'topped up' on the day of competition with **Bleeder Gard Paste**. Available in 908g (a two month supply at maintenance). Also available 30ml paste (3 x 10ml servings). RRP: £49.99.

Coff-Less Powder soothes the airways promoting clear healthy lungs, whilst providing support to the immune system. **Coff-Less** can be used in the short term to support respiratory health, which can then be maintained using Airways Xtra Strength Powder. However, **Coff-Less** may be used daily, long term, for those horses with weak respiration, laboured breathing or that have a sensitivity to dust and mould spores found in the air, hay and bedding.

Available in 908g (a two month supply at maintenance). RRP: £42.99. www.equine-america.co.uk