

Clean hay means  
healthier horses.  
That's pure  
Horse Sense.



[www.haygain.com](http://www.haygain.com)

**HAYGAIN**<sup>®</sup>

## Did you know?

- ✓ Research indicates 1 in 6 horses has a performance-impairing respiratory diseases
- ✓ It is estimated up to 80% of stabled horses suffer from airway inflammation
- ✓ Respiratory disorders are the second most common cause of lost training days in the racing industry
- ✓ A survey has shown that 1 in 4 people working with horses also has a respiratory condition
- ✓ Soaking for just 10 minutes can boost bacteria by up to 150%
- ✓ A study has found that horses fed poor quality, unhygienic hay are significantly more susceptible to colic

## Forage is the foundation of a horse's diet

Fibre is a fundamental part of every horse's diet. Grass and conserved forages such as hay and haylage contribute the largest proportion of fibre to the daily diet and are required to keep the horse physically and mentally healthy and the digestive system working properly.

## Forage and respiratory disorders

Even good quality hay contains respirable particles, mould and bacteria. If hay is baled when too moist, it results in ideal conditions for mould growth, which exacerbates the problem further and reduces the hygienic quality. These moulds produce spores contributing to the respirable dust which is allergenic and extremely damaging to the respiratory health of horses.

Unlike humans, a horse can only breathe through its nose, so every intake of breath introduces airborne particles including dust from hay into the horse's airway and lungs.

This dust also affects people, aggravating conditions such as asthma and hay fever, and even causes "Farmer's Lung" when inhaled in large quantities.

When scoped, many horses that appear to be healthy are found to actually suffer from respiratory disease, which reduces their quality of life and performance. This is because allergens such as fungal spores found in hay, lead to respiratory disorders such as Inflammatory Airway Disease (IAD) and Recurrent Airway Obstruction (RAO) also known as COPD.



Aspergillus



Bacteria



Dust mites

## Why Haygain hay steamers?

Haygain is the only scientifically proven method for purifying hay and haylage. It improves the hygienic quality of forage, thereby reducing the threat from respirable dust, mould spores and pathogens to produce highly palatable and nutritious forage.

Haygain hay steamers have been shown conclusively in scientific research trials to eliminate harmful mould and fungal spores, bacteria and dust mites. Each Haygain hay steamer delivers the steam evenly throughout the hay, ensuring total steam treatment. Respirable dust is removed and spores and bacteria are killed by the steam's humidity and the high temperature reached during the process.

- ✓ **Aids in the management and prevention of respiratory conditions**
- ✓ **Eliminates respirable dust particles**
- ✓ **Kills mould, bacteria, fungal spores and mite faeces**
- ✓ **Retains the nutritional value of hay**
- ✓ **Improves the palatability of forage**
- ✓ **Increases shelf- life of haylage**
- ✓ **Is suitable for laminitic, colic prone and post-operative horses**

## How Haygain works?

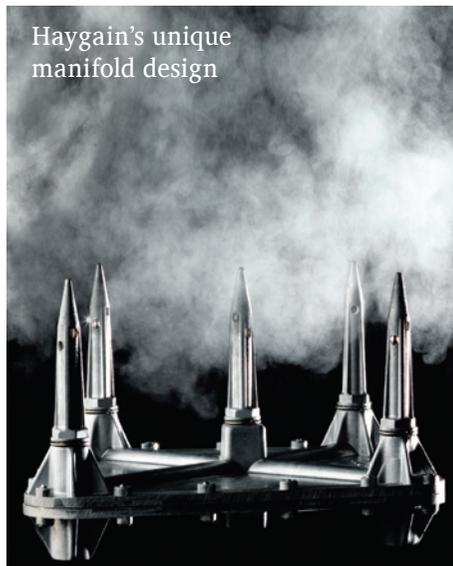
Haygain's unique method consists of a patented manifold system to effectively introduce steam into the forage. This is housed in a specially designed container, coupled to a top specification steam generator. Haygain steamers are supported by an unparalleled after-sales service and all come with a one year guarantee.

### Purpose-built steam chest

The thermally efficient steam chest maintains the steam volume and high temperature to ensure that the respirable particles, fungal spores, bacteria and mites in the forage are eliminated. This ensures the forage is cleaner, more palatable and maintains its nutritional value.

### Unique spike manifold design

The patented configuration of the manifolds pushes steam into the hay, distributing it evenly throughout the unit. The aluminium plates, which hold the spikes, accumulate more heat under the bale to assist with raising the temperature inside the hay chest, optimising its efficiency. Perforated spikes force steam from the centre of the hay outwards, ensuring total steam absorption.



## Scientifically Proven

Haygain hay steamers have been extensively researched and tested, amongst others, at the Royal Agricultural University in Cirencester, England. The Irish Equine Centre has evaluated Haygain hay steamer's effectiveness against *Aspergillus* - the most relevant fungal pathogen in hay - and has confirmed the effective elimination of this mould. A study carried out by the Kentucky Equine Research centre demonstrated that given the choice, steamed hay was preferred over dry and soaked hay. Steaming increased the amount of hay eaten, while the rate of intake and amount of chewing was not affected. Haygain purified hay, once tasted, was always the first to be consumed. A second and separate palatability trial has further validated that horses prefer to eat Haygain purified hay compared with haylage and dry hay.

*Summaries of Haygain published research are available on our website along with their full references.*



« Steaming hay has been proven as an effective treatment for eliminating allergens. However, if you do not steam the hay properly you risk increased mould and bacterial growth.

Haygain is the only method of steaming where I am confident the hay is steamed thoroughly and reaches the required temperatures to improve the hygiene quality of hay with no detrimental effects. »

**Dr David Marlin, Equine Exercise Physiologist  
Professor of Physiology at Oklahoma State University & Author**

## Product comparison

### Haygain HG One +

- Ideal for 1 horse
- Holds up to 8kgs hay/haylage
- Robust construction and made from food grade material
- Lightweight & compact
- 60 minutes cycle time from cold (approx.)
- Weight: 23kgs



### Haygain HG Go

- Designed for travel
- Holds up to 15kgs loose hay/haylage or haynets
- Collapsible bag allows you to travel light
- Insulated multi layer construction
- Non rip, food grade, marine material: non PVC
- 60 minutes cycle time from cold (approx.)
- Weight: 16kgs



### Haygain HG 600

- Feeds 2-3 horses
  - Holds 1/2 a standard bale of hay, up to 18kgs loose hay/haylage or haynets
  - Robust construction, stainless steel fittings and made from food grade material
  - Wheels and extending handle make it easily portable
  - 60 minutes cycle time from cold (approx.)
- \* boiler supplied will vary between countries to suit voltage supply\*



### Haygain HG 2000

- Feeds 4+ horses
  - Holds 1 standard bale, 35-40kgs loose hay/haylage or haynets
  - Robust construction, stainless steel fittings and made from food grade material
  - Wheels at one end of unit base
  - Ideal for larger stable yards
  - 60 minutes cycle time from cold (approx.)
- \* boiler/boilers supplied will vary between countries to suit voltage supply\*



## Easy to use – Fill, load, steam & unload



Use a watering can and funnel to fill the steam generator with clean tap water.



Load the bale/haynet/loose hay into the hay chest and push down onto the spikes.  
Close the lid of the hay chest and switch on.



Leave for 60 minutes and check that the thermometer on the lid is positioned in the green zone.  
Switch off and unload the hay. Feed immediately or up to 24 hours later

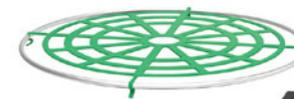
## Feeding forage at a natural pace

In their natural habitat horses eat for **60%** of their time whereas the stabled horse spends on average only **10%** of their time feeding.

### Forager™

The Haygain® Forager, with interchangeable forage regulators (patents pending), has been researched and developed to regulate the pace at which your horse eats, whilst allowing it to feed in a natural position.

The forage regulator is positioned between the muzzle and the hay or haylage; the horse pulls the forage through different holes, imitating grazing behaviour. Feeding through the forager allows your horse to enjoy its forage for longer. The Forager's innovative design allows access for light and ventilation making it easily accepted by your horse.



The unique Haygain Forager with interchangeable forage regulators (patents pending):

- ✓ Regulates the pace at which your horse eats
- ✓ Encourages natural feeding position and draining of the respiratory tract
- ✓ Prevents muscle tension in the back and neck
- ✓ Promotes a healthy gut and reduces the risk of colic.
- ✓ Aids in the prevention of gastric ulcers, obesity and laminitis
- ✓ Stops cross-contamination of forage and bedding, saving you time and money.
- ✓ Reduces stable boredom and the development of stable vices
- ✓ Well accepted by the horse due to innovative design allowing access for light and ventilation
- ✓ Easy to clean, fill and flat pack for travel

# Discover what the research has found

1. Bales of hay which were purified for 50 minutes in a Haygain hay steamer showed a dramatic improvement in hygienic quality with fungi, yeast and bacteria all reduced by 99%.

Wyss, U. and Pradervand, N. (2016) Steaming or Soaking. Agroscope Science. Nr 32 p32-33

2. After a 50-minute cycle in a Haygain hay steamer the nutritional profiles of 30 different types of hay were not significantly altered. The minerals were retained and there was only a minor reduction of around 2% of Water-Soluble Carbohydrate (sugar). This may make steamed hay a useful fodder for feeding ponies pre-disposed to laminitis.

James, R. and Moore-Colyer, M.J.S. (2013) Hay for horses: The nutrient content of hay before and after steam treatment in a commercial hay steamer. Proceedings of British Society of Animal Science Conference, Nottingham April 2013. p102

3. To prove the effectiveness of the Haygain hay steamer, four different types of hay with varying degrees of quality were steamed for 50 minutes. The test demonstrated that the respirable particles in all types of hay, whether only slightly dusty or highly contaminated, were reduced significantly.

Stockdale, C and Moore-Colyer, M.J.S (2010) Steaming hay for horses: The effect of three different treatments on the respirable particle numbers in hay treated in the Haygain steamer. 5th European Workshop for Equine Nutrition, Cirencester, Sept 2010. The Impact of nutrition on the health and welfare of horses. EAAP publication No. 128. Ed Ellis, A., Longland, A.C., Coenen, M and Miraglia, N. p136-138

4. Given the choice steamed hay was preferred over dry and soaked hay. Haygain steamed hay, once tasted was always the first to be consumed.

Moore-Colyer, M.J.S. and Payne, V. Palatability and ingestion behaviour of 6 polo ponies offered a choice of dry, soaked and steamed hay for 1 hour on three separate occasions. Advances in Animal Biosciences. Healthy Food from Healthy Animals. Vol 3 part 1. p127

To read more about our published research please visit : [haygain.com/pages/research](http://haygain.com/pages/research)



« We all know that dry hay - even of the best quality - contains dust that affects the horses' respiratory system. So to be sure my forage is clean, and free of any dust or spores, I use Haygain. »

Sir Mark Todd, CBE  
New Zealand eventer and five time Olympic medallist

« They are a great idea, work very well and take the fungal dust problem away completely. I've got six Haygain units; three in each yard. I get the service and the horses find even the top quality hay I feed more palatable, they really do eat it well so there is little wastage. »

Richard Hannon  
Racehorse Trainer, UK

« We have found the Haygain steamed hay is the ideal roughage for horses that have respiratory problems. Steaming eliminates all dust and fungal spores, while leaving the nutritional value of the hay intact. This means that you can ensure your hay is not a contributory factor in any respiratory allergy or airway sensitivity. We recommend that owners with horses showing signs of allergies steam their hay in this unique way as a way of making sure their hay is not causing any stress on the horses' respiratory system. We would see Haygain hay steamers as a valuable tool in preventing breathing problems in horses. »

Warren Schofield MA, VetMB, CertES, MRCVS, DipECVS  
Troytown Equine Hospital, Ireland

## For a healthier horse, make Haygain part of your feeding routine.

Available worldwide  
Find your local distributor online

**HAYGAIN**<sup>®</sup>

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