



FEED THAT PERFORMS

# Feeding the brood mare in late gestation and early lactation



Now that the mare is in the latter part of gestation the nutritional requirements increases significantly. The fetus is now growing more and more rapidly as the time of foaling approaches and you must respond and follow this up with appropriate feeding. After foaling, the requirements increase even more as the mare starts to produce milk. This means that it is important to pay close attention to the bodyweight and condition of the brood mare. It can grow thin very quickly if appropriate action is not taken now.

#### THE LAST MONTH OF GESTATION

In the last month of gestation the fetus puts on about 30% of its birth weight. This means that the nutrient requirements of the mare increases markedly. If the mare is not to take from her body reserves (grow thinner), the increased nutrient requirements have to be covered through adjustments of the ration.

According to tables of nutrient requirements for pregnant mares, in the last month of gestation the requirement for energy has increased to 133% of the maintenance requirement. In the same way, the protein requirement has increased to 180%. Requirements for calcium and phosphorus also increases to about 200% (two times maintenance requirements).

#### **EARLY LACTATION**

In the first month of lactation milk production gradually increases up to

about 3 kg milk per 100 kg body weight of the mare. This means that a 500 kg mare will produce up to 15 kg milk per day. This will of course require extra supply of nutrients to the mare. Energy requirement has increased to 200% of maintenance, while requirements for protein, calcium and phosphorus has increased almost 300%.

The mare will come into her first oestrus about 9 days after foaling, and second oestrus about 30 days after foaling. It is very important for mares that are going to be covered again that they are in a nutritional balance after foaling. It is especially important that the mare do not loose weight at this time as this can have a negative influence on fertility.

#### THE RATION

Mares in late gestation and early lactation should be given hay or haylage of high hygienic and nutritional quality. It is therefore important to have the roughage analysed at least for energy, protein, calcium and phosphorus.

To maintain good appetite throughout parturition and on into lactation, the mare should be eating the diet you expect to use after foaling. This means that you must use a feed mixture that is specifically designed for pregnant and lactating mares.

#### **PEGUS PC-HORSE**

In the Pegus Feed planning program, the nutritional requirements of the

brood mare automatically change as the pregnancy proceeds. The program knows when the mare became pregnant (you already added the date of conception) and also knows the current date (taken from your PC every time the program is opened and run). Thus the nutritional needs of the mare are calculated on a day-by-day, week-by-week basis. You should therefore check the brood mare's ration and body condition weekly during this last period of gestation.

After foaling, you enter the foaling date into PC-Horse, and the program will calculate the mare's nutritional requirements from data of body weight and a normal lactation curve.

#### ON PASTURE

When mares and foals are let out on pastures for the summer, we have to rely on the pasture vegetation to cover the nutritional needs of the mare and foal. In this period it can be wise to let the horses have access to a mineralised salt lick. As the growth and availability of pasture vegetation varies throughout the summer, we have to closely follow the horses to avoid them from getting thin. Additional feed or new pastures will have to be provided if necessary. A deworming program should be in place before the pasture season starts.



# Getting the Balance for Overweight Broodmares

Early in their pregnancies, broodmares can be managed like any other horse on a maintenance diet. Mares turned out on good-quality pasture can usually meet their nutritional needs simply by grazing during this time. However, as the mare passes her fifth month of pregnancy. her need for some nutrients exceeds what she can get from grass or hay. She could still be meeting all or most of her requirement for protein and energy by grazing, but owners may want to consider using ration balancer pellets to fortify the diet (Pegus Equi-Balance). These pellets add very few calories, so mares in good body condition won't become heavier by eating this supplement.

Pegus 25% Supplement Balancer is a concentrated source of essential vitamins and minerals and is only fed in small amounts of 400-500 grams per feed a part of a low calorie diet and no more than 1 kg as the daily total depending on size and weight and period of pregnancy.

Broodmare owners with questions about how to use a balancer pellet should consult with a Pegus Equine consultant for help in selecting and feeding this nutritional supplement to late-pregnant mares.

Balancer pellets like Pegus Equi Balance as the name suggests, are formulated to balance an all-forage diet or using grains like oats, barley, and maize (always insure that the grain has been processed correctly for equine use). In broodmare diets, these pellets supply the extra protein and minerals necessary for fetal development. This nutritional supplement has a higher concentration of calcium, phosphorus, selenium, copper, and zinc than a typical equine feed, and is meant to be fed in smaller quantities. Mares that have trouble maintaining body condition throughout the last half of pregnancy will probably need traditional fortified pelleted TRIPLE E STUD CUBES that supply extra energy and are formulated

for pregnant mares. Other broodmares that tend to become too fat are good candidates for balancer pellets, as they don't need lots of calories but still require mineral fortification to ensure proper development of a well-grown foal with a sound skeletal system.

Although owners and farm managers have been feeding pregnant mares for years, researchers are still discovering facts about exactly how these horses should be fed for the best results. For example, only about a decade ago, studies showed that supplementing pregnant mares with copper led to foals with a lower rate of problems in bone and joint maturation. Supplementing the foals after they were born didn't have the same effect of minimizing developmental disease; it was vital to incorporate the copper into the feed of the pregnant

It's important not just to add minerals to the mare's diet, but to add them in the right quantities and proportions. Calcium and phosphorus are both important in skeletal development, but too much of either mineral can cause just as many problems as too little. Also, some forms of a mineral are far more bioavailable (easily absorbed into the horse's body) than others.

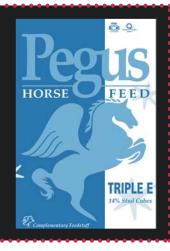
Supplements must be carefully formulated to keep this balance in mind. Broodmare owners with questions about how to use a balancer pellet should consult with a Pegus Horse Feed consultant or any Pegus stockist Store for help in selecting and feeding this nutritional supplement to late-pregnant mares. Owners and farm managers requiring tailor farm diets for their own breeding requirements please contact Declan Cullen 00447710883088 or info@pegus.ie www.pegus.ie



#### Triple E Stud Cubes

Triple E have been a popular and trusted part of many Irish breeders' feed plan for decades. This highly digestible, energy, vitamin and mineral-dense cube uses only the best Irish grains and cooked cereals to provide readily available energy to meet the needs of the broodmare during periods of gestation and lactation, both critical in the foal developments and broodmare health. Triple E is laced with essential minerals from Pegus Equine breeder pre-mix for the very important final 3-4 months of pregnancy where the foal lays down the building blocks for strong tissue and skeletal foundation for future strength. The energy dense cubes and bio-available mineral ensures high quality milk yields in lactation when the foal requires the mother's calorie and mineral-rich milk. Triple E benefits stallions during the covering season with essential energy levels and higher Vitamin E levels improving fertility and libido.

Call Tony Hurley on 087 251 4215.



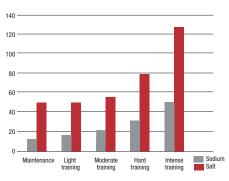
# Horses Need Salt!

Its Getting warmer. This means that your horses need more salt because of the heat, particularly when exercised heavily. A reduction in the fluid volume of the body quickly impairs the performance of horses.

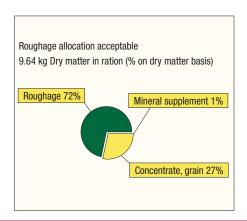
The water in the body, which constitutes 60-70% of body weight, has about 10 grams of dissolved salts (minerals) per liter. The salts contribute in an essential way to the functional properties of the body fluids. When salts are dissolved in blood plasma and cell fluid we refer to them as ions or electrolytes. Water intake and fluid balance is regulated both by the water and the electrolytes. The main electrolytes in the body are sodium (Na), potassium (K) and chlorine (Cl). The horse gets its minerals through the feed. In addition to the minerals that occur naturally in plant material, we must in many situations supplement the diet to obtain mineral balance. Concentrates, mineral mixtures and additional salt supplements are used.

Common cooking salt has the chemical formula NaCl, and thus consists of sodium and chlorine. When we give a horse the required amount of salt in the ration, we have covered two of the three major electrolytes.

SODIUM & SALT REQUIREMENTS (g/d)

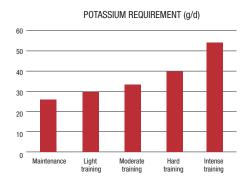


Feed name	Amount	
Meadow hay, average	8,25	kg
Oats	3,00	kg
Mineral Mix Generic	150,00	g
Salt	0.00	а



The graph shows the requirement for sodium in grams per day (blue bars). Red bars show how much salt (sodium chloride) we need to provide to meet this requirement at different exercise intensities. Daily salt intake must be increased from about 30 grams in a maintenance situation, to more than 120 grams when the horse is exercised intensively. Calculations apply to the summer season, and a body mass of 500 kg. During the winter, requirements will usually be lower, due to lower losses of sodium and chloride through sweat.

What about potassium? We are not supplying potassium by giving salt in the diet. However, there is plenty of potassium in forage, silage and hay. Normally, the potassium content in roughages will be 20 - 30 grams per kg of dry matter.



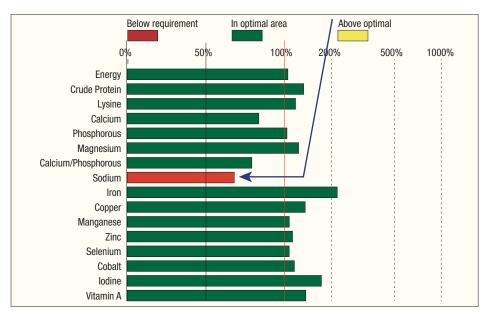
The graph shows an increasing potassium requirement from about 25 grams per day during maintenance conditions, to 50 grams during intensive training. When you allow your horses a sufficient roughage intake (PC-Horse will guide you), potassium requirements will be met by a good margin. It is therefore only in exceptional cases that you need to provide extra potassium, one example may be during endurance rides.

The practical conclusion is that we need to add salt to the ration, in considerable amounts in periods with heavy exercise, especially in summer.

For horses in training, a salt lick in the stable box is usually not adequate. Most horses will not consume enough salt in this situation. It is better to provide salt (granulated or ordinary kitchen salt) directly in the feed trough, preferably together with concentrate. For broodmares and young horses on pasture, sodium intake will be adequate provided they always have access to salt licks

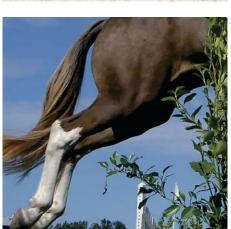
To make sure that your horses are getting enough sodium (salt) we can use the Pegus feed balancing program. Once we have defined your horse, we select salt together with the other feeds. All feeds contribute Na and Cl to the final diet. Therefore, it is best to add salt at the end, when you have chosen amounts of the other feeds. On the selected bar "Salt" line (blue when active), and adjusted to increase the amount of salt in the ration until the sodium bar turns green. This indicated we have balanced salt requirement and salt supply!

With performance horse the refuelling of lost minerals and salts are paramount to for effective performance and muscle function. In recent research it proven that horses in a mild temperature had lost up to 23 litres of fluid in at x-country exercise. It has also been discovered that horses though evaporation and passing faeces during travelling lose 1 litre per 1 hr of journey. These two factors unaddressed can leaving to dehydration to the performance horse and off course failure to perform to the its ability Pegus Horse Feed highly recommend their performance electrolytes Xtrolyte Powder and Xtrolyte Liquid.



# Keep those Joints Moving







Performance horses put a lot of strain on their legs as they run, jump, spin, pull carriages, or perform sliding stops from a full gallop. Leisure horses that never go faster than a slow jog, the extra weight can also wear and tear on joint structures over long periods

To keep your horse's joints in the best condition for a long riding career, follow these tips to preserve health and prevent discomfort or lameness.

It will always start with good nutrition, this is key to overall health in horses. Especially in young horses, feeding for smooth, gradual growth will help in the development of strong bones and healthy cartilage.

Slow, steady training is important in keeping horses sound. Begin with short, easy exercise periods and increase the length and intensity of workouts over a period of several months. This type of conditioning allows the horse's muscles, bones, heart, and lungs to adapt to the demands of performance. There is less chance of joint injury if the horse has the fitness level to perform without developing undue fatigue.

Allow time for reconditioning after a layoff. If the horse is out of work for more than a few weeks, back off on the level of exercise when riding resumes. This is especially important if the horse is recovering from an injury or illness.

Keep horses at an optimum weight. Obesity increases the stress on joint structures, eventually leading to unsoundness in some horses. Have the Pegus team advice a controlled diet plan for weight management.

Check for early signs of joint problems such as heat, swelling, or lameness. If joint issues are diagnosed and treated in their initial stages, the chance for healing is enhanced and further damage may be avoided.

Keep horses on a regular schedule of hoof care. Trimming and good fitted shoes will keep the horse balanced, avoiding unnecessary strain. Corrective trimming and shoeing can also help young horses overcome conformation faults that put extra stress on knees, hocks, and fetlocks.

Limit work on hard surfaces. Extreme concussion can damage joint cartilage, so riders should try to avoid long periods of galloping or jumping on hard, dry ground. For horses that are frequently ridden on roads, padded soles can absorb some of the shock that is transmitted up the horse's legs with each step.

Joint supplements like Joint A Flex HA from Pegus Equine Health can support joint health and extend the active years for many horses. Joint A Flex HA delivers sodium hyaluronate, a structural component of joint cartilage and synovial fluid its also contains

glucosamine HCl and chondroitin sulfate, MSM, and Omega 3 and is designed to assist in maintenance of joint integrity. It may also slow the progression of arthritic changes in older horses.



# JOINT-A-FLEX HA

#### Joints · Mobility · Action

Omega 3 + Glucosamine + MSM + Chondroitin + Hyaluronic Acid A new generation feed supplement to support mobility in the horse.











# PRODUCTS That PERFORM

#### DIGESTAID





Supplying live yeasts which are beneficial to the horse to stabilise intestinal flora and digestion in cases of gastric disturbance. Use in times of digestive disturbance in times of stress.

Plus: Threonine - An essential amino acid for gut health. High concentrations of Threonine are needed for mucous secretion in the gut. These secretions help protect the gut wall from:

- Pathogens and endotoxins
- Water loss
- Physical damage
- Digestive enzymes

B Vitamins - Promoting a healthy digestion in your horse.

Supporting against inappetance

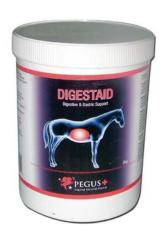
Vitamin E - Improved immune response and disease resistance

Vitamin C - Natural antioxidant

When to use Digestaid:

- Following deworming
- During and after antibiotic treatment
- During digestive disorders
- Poor feeders
- Travelling
- Foals at birth

- · During veterinary treatment
- Colic
- During incidence of diarrhoea
- Prior to and during training
- Mare at foaling



#### PRO BOOSTER







Pro Booster is a balanced multi-vitamin & trace element booster for horses, ponies. Containing Omega 3 plus 20 key micro nutrients including, Albion MAAC's which are fully protected to ensure a high level of bio-availability. Minerals in this form are better protected against adverse interactions in the gut and are easily absorbed. MAAC's are resistant to antagonists such as sulphates and molybdenum. A large amount of suspected deficiency is not as a result of primary deficiency but secondary interaction rendering the minerals in the diet unavailable to the horse.

#### Pro Booster supports

- Race/Event performance
- Immunity & health
- Fertility

#### When to use:

- Booster for horses in training
- Conditioner for horses for sales
- Easy to administer

- Metabolism
- Hair & coat condition
- Conditioner for horses racing
- Support for horses recovering from an illness
- Exceptionally palatable

## FARRIERS' BLEND





Nutritionally supporting hoof growth & integrity.

Farriers' Blend provides nutrients to support and nourish the hoof. This sulphur enriched formula supports hoof growth and the integrity of the hoof, with MACC Chelated zinc for maximum absorption

- Biotin
- Amino Acids
- MSM
- Chelated Zinc
- Chelated Copper





## JOINT-A-FLEX HA







#### Joints · Mobility · Action

Omega 3 + Glucosamine + MSM + Chondroitin + Hyaluronic Acid Joint-A-Flex a new generation feed supplement to support mobility in horse.

- Omega 3 research has shown Omega 3 may safely support the relief of inflammation and pain caused by arthritis, as well as slowing joint dehydration.
- Hyaluronic Acid is composed of d-Glucoronic acid and N acetyl D glucosamine and is
  found in both the extracellular and intr cellular matrix, especially in the soft connective
  tissues of horses. Hyaluronic Acid is noted for its ability to form highly viscous solutions
  making Hyaluronic acid the primary constituent of Synovial fluid (JOINT LUBRICANT) in
  the joints of horses.
- Glucosamine enhances the level of glycosaminoglycans in the joint. These are the 'building blocks' in the cartilage matrix. Gl cosamine will increase the hyaluronate content in the joint. Hyaluronate is a fundamental component of synovial fluid - the joint lubricant.
- Chondroitin Sulphate is a natural 'water magnet' in the joint to withstand constant compression and concussion. Chondroitin sulphate also inhibits 'the cartilage chewing' enzymes that are present in damaged joints
- Chelated Zinc together with sulphur forms the structural tissue we know as keratin
- Vitamin E Proven antioxidant
- Lysine Essential building block for muscle protein



#### BUILDMAX





To supplement amino acids and other nutrients to support muscle development in the horse

- Concentrated Amino Acids
- Gamma Oryzanol
- Creatine
- Carnitine



## XTROLYTE LIQUID





A liquid electrolyte that is mixed in the feed daily. Xtrolyte Liquid does not contain any banned substances. Recognised by many top trainers and riders as an essential part of the diet for performance horses and racehorses. Speeds the return to peak condition after racing, traveling or heavy work. provides a convenient liquid form that is more acceptable to horses. Some horses are reluctant to take powdered minerals.

Instructions For use

Feeding Rate: 60 - 120ml per horse per day, depending on work load.



#### XTROLYTE POWDER





A powdered electrolyte horse supplement to aid the replacement of essential electrolyte losses. Xtrolyte powder has been designed so that it can be mixed in the feed or dissolved in water. Xtrolyte powder is of a lower specification than the liquid electrolytes, but is often favoured for its value for money. Xtrolyte powder meets the demand for electrolyte losses occurring after low medium intensity exercise.

Instructions For Use

Feeding rate: Up to 100gms per horse per day.



### KARRON OIL







Karron Oil is a high quality flaxseed oil emulsion containing highly prized omega 3 and 6 essential fatty acids. Omega 3 can be low in horses fed preserved forages and concentrates. Flaxseed oil contains naturally occurring omega 3 and 6 that horses need. The omegas are well known to improve skin and coat health, leading to a lustrous shine. They are particularly supportive of the immune system as both are antioxidants, which guard against tissue damage. Omega 6 is involved in immune reaction regulation while omega 3 is a natural anti-inflammatory and can help dampen harmful immune responses such as allergies or hypersensitivities. Karron Oil is a digestive aid in horses, helping maintain good digestion and guard against digestive upset. Karron Oil is a traditional supplement, ideal for daily usage in all horses providing a powerful omega boost, benefiting the horse both inside and out

Instructions For Use Add to the normal feed ration. Feed 50ml per day.

## CALMIN & COPPER





There are some circumstances when mares and foals need more minerals than can be supplied in a liquid supplement or a concentrate feed. Calmin & Copper is rich in calcium, required for correct growth and development of the skeleton. There is also the correct ratio of Calcium to phosphorus. Phosphorus is also a vital component in the development of the skeleton and is vital in growing horses. Calmin & Copper also contains magnesium, required for Calciumand Phosphorus metabolism. Copper is included as it is involved in bone and cartilage formation, again important for the growing horse. Calmin & Copper also contains the vitamins A, B1, B2, D3, and E along with selenium and other trace elements.

This supplement provides most of the calcium and phosphorus needed to ensure optimum skeletal development. The inclusion of bioplexes improves absorption and ensures the horse receives all available minerals.

Instructions For Use

Feeding rate:

Broodmare: 1 Scoop, Yearling or 2YO: 2/3rd Scoop, Foal: 1/3rd Scoop.

Bulk Mixing: 1.36Kg / 50Kg

## Linseed Oil





Supports general health and maintains a rich, natural shine. Rich in Omega 3 fatty acids, (particularly linolenic acid and alpha-linoleic acid) supplementing with Linseed Oil will be reflected in a fabulous shiny coat. Pegus only use pure cold pressed Linseed Oil, obtained without the potentially harmful solvent extraction process. Pegus Linseed Oil is safe, good quality and suitable for all horses and ponies.

Instructions For Use Add to the normal feed ration. Feed 50ml per day.

#### GASTRO SHIELD



Gastrointestinal ulcers are an unfortunate fact of life for many performance horses. Because ulcers can be so uncomfortable, the temptation for their owners is to reach for the product that will offer the quickest relief, usually in the form of conventional drugs. However, these drugs block or buffer the horse's stomach acid, which hinders digestion in the long term. Ten to fifteen percent of protein digestion depends on pepsin activity in the stomach and pepsin is only active in an acidic environment (i.e. when stomach acid is present). Stomach acid also acts as a defence against pathogenic bacteria colonizing the stomach and small intestine. While conventional drugs to offer immediate relief for the horse, they ultimately interfere with digestion and set the horse up for other long term problems.

The majority of horses with gastric ulcers do not show outward clinical signs. They have more subtle signs, such as: poor appetite, dullness, attitude changes, decreased performance, reluctance to train, poor body condition, poor hair coat, weight loss, excessive time spent lying down, low-grade colic, loose faeces, etc.

Instructions for use
Feed one 80ml serving per day
40ml prior to morning feed and 40ml prior to the evening feed
Feed for a minimum of 14 days or longer term as required









#### Equi-Balance















Equi-Balance is a low-starch, low-calorie concentrated source of vitamins and trace minerals for all classes of horses. Proper nutrition is extremely important in managing all types of horses, but supplying optimal nutrient intake without providing excess calories to those with low energy needs, particularly those with metabolic issues, can be especially challenging. Easy keepers at risk of, or exhibiting signs of metabolic syndrome or insulin resistance will benefit from careful management of the amount and type of forage and feed, with special attention to carbohydrate and caloric intake. Equi Balance is a natural product helping to maintain effective digestion by the inclusion of Equisaf Yeast Cultures and Bioplexes. In pursuit of further benefits for your horse's health we have included bioplexes, which are mineral proteinates of Zinc, Iron, Copper and Manganese. These are bonded to a range of amino acids to allow a number of potential absorption routes within the horses system. Bioplexes have been shown to improve equine health in general and in particular, immunity, development of bone, muscle structure, fertility and condition.

Why should I use Equi -Balance for my horse

- Concentrated low-clorie, low-non-structural carbohydrate source of vitamins and trace minerals
- Fulfils the vitamin and mineral needs of horses and ponies that are on forage-only diets or that consume less than the recommended daily amount of fortified feeds
- Features elevated zinc concentration
- Contains yeast culture to enhance digestion of fibre and other nutrients
- · Low-intake, palatable pellet allows for easy feeding

Suitable for horses and ponies: Cushing Disease, Laminitis, over-weight ponies, older horses, broodmares, stallions, performance horses, post colic, show horses, sales prep, youngstock, native breeds, good doers,



## Garlic, Honey & GLUCOSE









Garlic, Honey and Glucose is a highly palatable liquid supplement that combines the properties of Garlic, in oil form, with honey and glucose. Honey is a highly palatable source of natural sugar as well as having antioxidant, antibacterial and anti-inflammatory properties. It is also believed to be of benefit to coughs and to gastric ulcers. Liquid glucose is the easiest absorbed form of carbohydrate, providing a palatable base for the garlic oil, as well as providing low levels of available energy.

Garlic has been used since ancient times for its beneficial properties. It is used to support the respiratory system, encouraging the healthy expulsion of mucus from the lungs. Rich in sulphur, Garlic may also be of benefit to healthy hoof formation. Feeding Garlic is also thought to support to the blood, and can be used to support laminitis, arthritis, sweet itch and skin problems. It is known to aid digestion, supporting production of beneficial bacteria within the hind gut. Garlic has also been considered to be of benefit before and after a course of antibiotics, to provide support to the immune system. It is also known to contain B group vitamins. Vitamin C. Potassium and phosphorous as well as some amino acids. Garlic is also known to have antioxidant properties and maintain normal fat metabolism.

This product is ideal for horses in all disciplines of work, breed and age and it will help to support the respiratory and circulatory systems, allowing optimum oxygen to the muscles and vital organs.

Instructions For Use Feeding Rate:

Horses: 30ml per horse per day. Ponies: 30ml per horse per day.





Hazelbrook, Ratoath, Co. Meath, Ireland Sales: +353 01 6277093/94

David: +353 86 3000 500 Declan: +44 7710 883 088

Freephone: ROI - 1800 37 8463 / UK - 0800 011 4182

email: info@pegus.ie • www.pegus.ie



# Take a Deep Breath ...Forage

#### PREVENTION OF RESPIRATORY DISEASE

Exposure to respirable particles such as mould spores and bacteria can induce allergic responses and horses can develop a hypersensitivity reaction. Even the best quality hay is high in respirable particles. These particles form the "dust" that you cannot see (they are less than 5 µm in size), and have a 50% chance of being inhaled deep into the lungs, causing the respiratory disorder Recurrent Airway Obstruction (RAO).

Within the stable environment, even those very well ventilated (five changes of air per hour) the respirable particles obey Stoke's Law and fall with terminal velocities proportional to their diameters, which is less than 0.1cm/second. This means that the stable environment can have up to 3,000 respirable particles per ml of air. Assuming a tidal volume of four litres in an average horse, this can result in 12 million particles taken every breath! With such a challenge for the horse every day, it is no wonder the statistics of respiratory problems in horses are so high.

Horse and Hound reported in 2006 that 1 in 6 horses in the UK were diagnosed with RAO and that 80% of horses stabled for part of the time suffered some degree of airway inflammation. Furthermore, an epidemiological study found that respiratory problems in racehorses to be the second highest reason for lost training days after lameness; thus, a dusty stable environment can have serious health and financial implications for all equestrian establishments.

#### MANAGING AN EXISTING RESPIRATORY CONDITION

'Lung function can be improved within 3 days by environmental management alone - emphasises the need for allergen reduction as the cornerstone of treatment of RAO' (Jackson, et al., 2000)

Respiratory diseases can be effectively managed by minimising respirable dust, mould spores and bacteria in the horse's environment, particularly those in the horse's breathing zone. Since hay contains high concentrations of these contaminants and the horse's nose is

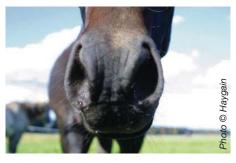


in the hay while it is eating, it is vitally important to reduce this source of dust. Good stable house-keeping, such as good ventilation and use of suitable dust-free bedding, along with feeding steamed hay, will substantially reduce debilitating symptoms such as coughing and also help clear lungs of mucus, so that the respiratory system can work more effectively.

#### IMPROVING YOUR HORSE'S PERFORMANCE

The ability of a horse to perform to its full potential is in part dependant on the efficiency with which oxygen is transported from the lungs to the bloodstream and the muscles. Mucus-obstructed or inflamed airways, mean that less air reaches the small air sacs deep (alveoli) inside the lungs, so the normal exchange of oxygen and carbon dioxide is impaired. In short, the horse's body becomes starved of oxygen during exercise and the horse tires easily.

With 80% of horses stabled for part of the time suffering from airway inflammation and some not exhibiting any obvious symptoms, the root cause of loss of performance may not be immediately apparent. Stress during exercise can manifest as resistant behaviour/ unwillingness to work and a compromised airway function can affect all horses, not just those galloping.



# PROVIDING A PALATABLE FORAGE COMPLETE WITH ESSENTIAL NUTRIENTS

Steamed hay is a highly palatable product that has been proven to be favoured by most horses over other forages. Unlike soaking, steaming ensures that the profile of essential nutrients is retained within the hay. Steaming increases the palatability of hay of a relatively low nutritional value, thereby commending its use for horses with low nutrient requirements or for those with laminitis and other metabolic disorders.

Hay is always an excellent source of fibre, which provides slow-release energy and satisfies the innate need of the horse to chew. This can help in preventing the development of stereotypical stress behaviours among horses which have to be stabled for long periods.

Furthermore, chewing causes the horse to produce saliva and the bicarbonate in saliva buffers stomach acid, thus helping to prevent gastric ulceration. Typically containing 6-8% protein and a variety of minerals in readily-available form, hay, especially when steamed, can make an important contribution to the daily nutritional requirements of horses at all levels of work.

For horses and ponies with Laminitis, Insulin Resistance or Metabolic Syndrome, you may be looking for a way to reduce the WSC content. The latest research shows that the most effective way to do this is to soak for 9 hours and then steam.

Steamed hay will help maintain good respiratory health and improve digestion, resulting in a reduction in the need to treat with drugs, lower vet bills and less interruption to your competition schedule!

#### FOR THE ENVIROMENT

Stop soaking and start steaming to reduce the amount of water you use! An average steam cycle will use about 4.5 litres of water compared to up to 50 - 250 litres when filling a container suitable for soaking hay. The sheer volume of water used has an impact not just on your water bill, but on the environment too.

Once the hay has been soaked in all of that water, you are left with a container full of a brown, smelly liquid high in bacteria, mould, WSC, protein and minerals, all leached out of the hay so significantly reducing its nutritional and hygienic quality. Post-soak water has a biological oxygen demand (BOD) 9 times higher than raw sewage making it an environmental pollutant which should not be put down storm drains. How many horse owners, in an attempt to save water re-use this contaminated water for subsequent soakings, not knowing that it has now become a major health hazard? If this waste water then makes its way into natural water sources, horse and yard owners are polluting the environment unknowingly.

The small amount of condensation water produced by a hay steamer is not only significantly lower in volume, but is also poses no threat to the environment as it contains no bacteria, mould or leached nutrients.



# Sponsorship Gallery



Supreme Champion trophy at Gransha Pegus Gala Weekend show



Vincent Van Cob winner Supreme Champion in Show at Gransha Pegus Gala Weekend show



Emily Kirkland and Mika, Champion Pony Ardnacashel St Patrick's Weekend Show



Working Hunter riders at Ardnacashel St Patrick's Weekend Show



Impulsive Star trained by Sean O'Brien winner of the Pegus Horse Feed Point to Point Flat Race at Cork

## HIGH PERFORMANCE

Highly palatable blended sweet feed mix designed to meet the demands of horses in hard work or requiring a faster release speed of energy. Using only the best tested Irish oats and toasted cereals, this feed provides readily available energy to meet the needs of the horse's anaerobic respiration during periods of fast and demanding work, as well as providing the organs and tissues with essential vitamins and minerals for improved function.

Also includes Pegus Equine pre-mix supplement and proteins for excellent muscle tone and tissue strength during exercise, higher levels of antioxidants which are essential to aid recovery and reduce tissue damage. Pegus blended oil aids stamina and reduces lactic acid production, a major factor in limiting performance.

Suitable for Eventers, Showjumpers, Trotters, Racehorses, Broodmares early lactation, Breeze-ups, Polo, Hunters.





Tony Hurley of Pegus Horse Feed, Coleman Purcell, Pat O'Keefe and Donald Buckley with winning conections

# Horses Run in the Blood



It wasn't by chance that Crawford Brothers have established themselves as one of the leading producers and trainers of racehorses in Ireland and the UK. The family history is steeped in hunting, Point to Point, carriage driving and eventing. Bill Buller along with the Crawfords' grandfather George Byrson established the first Horse Trials in Ireland in 1959 on their adjacent farms at Scarvagh House and Lisnabrague Lodge where 59 riders turned out for the first event.

The core values of horsemanship were handed down by their parents Robert and Edith and through the East Antrim Pony Club Stuart, Steven, Ross and Ben all earned their grass stains one way or another. Eventing soon became the sport of choice with each one representing Ireland at Pony, Junior, Young Rider or Senior Level, highlighted by Stuart winning Team Gold with the young riders in 1995 and riding Kingatchachuk at the World Equestrian Games in Rome in 1998. Steven pursued his career as a jockey with leading trainers Jamie Osborne, Liam Browne, Nigel Twiston-Davies and Aiden O'Brien at Ballydoyle. Steven also represented Ireland, and was the first jockey from Ireland, to win the Fegentri Gobal Jockey Trophy for Flat and Jumps.

The family's talents soon become a powerful asset when they embarked on training racehorses and Stuart took out his licence; the collective experience of the brothers started to show with their first big win with Oh Jackie taking the prestigious LaTouche Cup at Punchestown.

Since that victory in excess of one hundred winners have followed under National Hunt rules and the stable has grown from strength to strength. Together Crawford Brothers Racing care for around eighty horses and welcome fresh enquiries and new owners into the yard. In 2012 the stable landed a notable victory at the Down Royal Festival with Gilt Shadow under a ride from Steven. In 2013 Stuart and Steven brought the curtain down on Ladies' Day at Aintree when the then unbeaten Legacy Gold won the John Smith's Mares' National Hunt Flat Race and in 2015 Crawford Brothers Racing trained Now Let Go to win the ITBA Premier Fillies Bumper at the Punchestown Festival. Based at the family home at Newlands Farm outside the hamlet of Magheramourne overlooking the bay at Larne harbour, they have easy excess to the ferry and make frequent trips to the UK racecourses. As their roster of owners

and racing club members grow you are assured that your horse is in safe hands with the Crawford Brothers team and there is always a friendly welcome, cup of tea and home baked bread... thanks to mummy Crawford...Edith.

For more information visit www.crawfordbrosracing.com











Hazelbrook, Ratoath, Co. Meath, Ireland
Tel: +353 86 3000 500 • email: info@pegus.ie • www.pegus.ie
or talk to Declan Cullen on +44 7710883088





Free Nutritional Helpline: ROI 1800 37 8463 / UK 0800 011 4182

The information contained in this publication was correct at time of going to press and is deemed thoroughly reliable. However, no responsibility is assumed for errors, omissions or any consequences arising therefrom. The views expressed in this newsletter, unless expressly stated, do not necessarily represent the views of Pegus Horse Feed. Published by Pegus Horse Feed, March 2016. Front cover photo by Selina O'Meara Photography, www.selinaomeara.com