

Delivering Hydration & Nutrition On Demand

## EquidGel – A new Hydration and Nutrition system

A new innovative product is gaining momentum and proving to be an unstoppable force...

The revolutionary hydration and nutrition delivery system (GB and International PCT Patent Pending) was launched during the prestigious BETA international trade fair in Feb 2014. It was showcased in the New Product Gallery and also entered into the ETN Innovation Awards.

EquidGel is a multifaceted feeding system which is set to benefit every area within the equine industry. Designed and formulated by Equine Nutritionist Sandra Murphy BSc (Hons), EquidGel has been extensively researched and its ingredients are backed by scientific data which proves how EquidGel can benefit the health and wellbeing of all horses no matter what job they do.



Inventor and Nutritionist Sandra Murphy BSc (Hons) Equine Sports Science.



Demonstration of how a traditional feed separates into solids and liquid and how the soluble fibre formed by EquidGel suspends all particles within the gel. Picture by Zoe East.

### What makes EquidGel different?

With the impaction colic and dehydration being the biggest killers of horses in the world, EquidGel has been designed to attempt to combat this huge problem using only a few natural ingredients. EquidGel goes right back to basics, 85% is highly nutritious Alfalfa (Lucerne) meal along with a high energy omega-3 oil contained within a novel ingredient which when mixed with water produces a gel that retains up to 9.6 times own weight in water and suspends the particles of Alfalfa meal and other nutrients within it. This unique method delivers water where it is needed.

#### How does it work?

EquidGel is taken in the form of a drink, which appeals to the horses very powerful, natural instinct to forage due to the highly palatable and nutritious Alfalfa, rather than the thirst mechanism

which is a regulatory response which may or may not be switched on. Because the formation retains the water within the gel for much longer, this allows the water to be transported further along the digestive system into the hindgut so that the horse has a 'reservoir' of water to call upon when required.

## Is EquidGel a feed or a supplement?

Not only is EquidGel a hydration system, it is also the only complete horse feed on market, it is not a supplement it is a balanced diet with a nutritional value of between 12.2 and 14.9 MJ digestible energy per kg which puts it on a par with many good quality conditioning feeds on the market today. EquidGel is the only feed that contains all the nutrients, vitamins and minerals a horse need, but most importantly it contains the right amount of water according to its weight and workload. Because it contains only good quality forage and a high level of non GM Omega-3 Oil, it can replace the carbohydrates (grain) in a ration, which can cause digestive and metabolic disorders, and provide the horse with good quality energy from the hindgut and from the oil which a horse can utilize for energy very efficiently.

# What are the benefits of EquidGel?

EquidGel has the potential to become a major benefit to horses engaged in activities such as:

- Sustained exercise or exertion, such as endurance, performance horses, hunting polo etc. -The ability of EquidGel to hold water within a gel allows more water to pass through the small intestine (the initial site of free water absorption to the interstitial fluid where there is no storage) into the hindgut where it can be stored for use in times of exertion stress. The stored water and nutrition molecules are broken down by microbes to produce slow release energy in the form of VFA's and hydration which helps to prevent the detrimental effects of dehydration and fatigue.
- Equines working in temperature in excess of 30°C, which include donkeys, asses and mules where heat stress can increase water intake by up to 400% EquidGel is highly palatable and can be used to provide both hydration and nutrition on demand increasing the gastrointestinal fluid pool allowing a more stable bodily fluid balance allowing these horses to not only benefit from highly nutritious fibre but also to benefit from being well hydrated to perform their work on a daily basis. Natural electrolytes such as sodium and potassium are at adequate levels to help regulate body fluid balance, helping to support those that are lost in sweat.
- Horses that have been neglected and suffering from dehydration and malnutrition EquidGel provides a highly palatable, easily digestibility meal to a horse that may have a compromised digestive system. EquidGel is a fibre based feed which contains a high level of Omega-3 oil which increases the energy density of the feed to provide slow release energy and good quality protein to help rebuild lost muscle tissue. The storage of excess fat increase body condition, promotes a healthy coat and hooves. EquidGel may be a helpful tool in the rehabilitation of equines and possibly has a use in the veterinary practices before and after elective surgery procedures because of the small particle size and the increased volume of water, impaction colic is less likely to occur.
- Horses travelling long distances According to the World Horse Welfare organisation, around 80,000 horses travel across Europe every year, and not all of these horses are competition horse, unfortunately the majority of these horses are travelling to slaughter and strict guidelines have been introduced to provide these horses with a better quality of life. EquidGel could be an efficient, labour saving method of providing horses such as these with simultaneous hydration and nutrition on demand allowing them to obtain slow release, non heating energy to enable them to stand in packed crates in addition to being well hydrated for the journey.

Performance horses can also benefit from EquidGel before and after travelling for long distances. Many horses do not take in adequate water and nutrients before or during long hours of transportation and it has been documented that the amount of work a horse has to

do to keep balanced whilst moving about in the vehicle is equivalent to a fast walk, therefore if the horse is having to perform this type of constant exercise for in some cases 4 hours at a time, it is no wonder they require time to recover on arrival at their destination. The soluble fibre formed allows more water and good quality fibre to reach the hindgut and to provide a constant release of nutrients and water to replenish that used during the journey allowing the horse to arrive seemingly fresh with vitality and requires very little recovery.

- A growing number of competition horses, in particular racehorses are being diagnosed with gastric ulceration because of endoscopic procedures becoming more widely available for horses in all disciplines, These horses sometimes display quite disturbing behaviour such as cribbing, wind sucking and other distressing vices, it is not understood exactly why these vices occur but one explanation is because of acid production with in the stomach. High starch feeds such as grain has been shown to irritate gastric ulcers causing considerable pain. EquidGel has a very low level of non structural carbohydrates (sugars), but a high level of fibre which over time causes less acid to be produced in the stomach. With a pH of 6.5 the soluble fibre gel seems to sooth and alleviates this condition possibly acting like an antacid for horses but more likely lining the stomach with acid buffering fibre.
- EquidGel may also have the beneficial effect of reducing excitable behaviour and helping to promote regulation of some metabolic disorders such as Azoturia. It has also been documented that the soluble fibre gel may also form a barrier between the contents of the stomach and the gut wall reducing the absorption rate of carbohydrates into the blood stream. This could reduce fluctuations in blood sugar levels, possibly reducing insulin production.
- There are many more applications for EquidGel such as:
  - Pregnant and lactating mares High energy, hydration and good complete protein profile for growth and milk production.
  - Weanling foals High fibre, low carbohydrate for reduced excitability. High oil for condition, complete protein profile for growth and a follow on liquid fibre feed to help create a healthier hindgut.
  - Horses with compromised dentition that are unable to ingest adequate large amounts of long stemmed fibre. EquidGel can be ingested easily in the form of a drink reducing loss of body weight and condition.
  - For endurance horses, EquidGel is highly palatable and increases the volume of the hindgut fluid pool. Feeding time is reduced as EquidGel is in a semi liquid form which empties the stomach quicker than a grain feed which sit in the stomach producing acid. For those horses that are working hard the diversion of blood from the digestive system to the muscles means that stomach ulcers may develop.

This new exciting product is gaining popularity due to its sheer versatility and simplicity and in some cases the effects can be seen instantaneously. It has already saved the lives of many horses and made many owners happy and contented. EquidGel is set to become a valuable tool in the management of horses by allowing owners, veterinarians and organisations to provide not only a high level of fibre based nutrition but to enable them to deliver hydration whenever horses in their care require it.

The launch of EquidGel at BETA has enabled trials to be carried out as samples have been provided to some major organisations and top UK and International riders within each discipline. EquidGel has is also being trialed under hot, humid conditions in countries like Singapore where the humidity can cause severe colic



EquidGel is available to order in 10 kg bags. To order go to equidiet.org@gmail.com or via our Facebook page

due to dehydration and it is also set to be reviewed by highly regarded Equine Scientists and Equine Nutritionist over the next few months. Orders for EquidGel can now be placed by email: <u>equidiet.org@gmail.com</u> or via Facebook, but be sure to 'like' EquidGel to get the latest updates, information and interactive feedback.