

FEEDING RECOMMENDATIONS FOR HORSES AT RISK OF GASTRIC ULCERS (EGUS) - Addressing Squamous and Glandular Stomach Regions

Overview

Equine Gastric Ulcer Syndrome (EGUS) is a condition affecting a large number of horses due to the nature of the equine stomach, and the feeding methods, routines and feedstuffs often used in modern horse management. The condition is recognised in two separate areas; ulceration in the upper squamous part of the stomach (ESGD), and ulceration in the lower gastric area of the stomach (EGGD) as treatment and recommendations differ depending on the location of the ulceration. These recommendations address known risk factors for ESGD and EGGD in two sections, and can be used as an aid to management of horses at risk of gastric ulceration or irritation.

Section 1 - Equine Squamous Gastric Ulcer Syndrome (ESGUS)

Management is Key

- Allow horses constant access to forage – always offer stabled or yarded horses ad lib hay. Access to roughage to allow continuous movement of fibre through the gastrointestinal tract is beneficial to keep gastric pH at desirable levels.
- Feed lucerne hay as the preferred source of forage. Lucerne has greater buffering properties than grass or oaten hay, and has been shown to increase pH in the stomach and reduce severity of gastric ulcers.
- Give a small meal (500g-1kg) of lucerne chaff or hay 30-60 minutes before the horse undergoes any work to provide buffering of acid that is splashed around the stomach during exercise. The addition of 500g - 1kg of a low starch concentrate **Pegasus Sweetmax** to the chaff may increase intake and provide better buffering
- Reduce starch intake by reducing grain intake, feeding a low starch feed and supplying more energy from fat and digestible fibre. **Pegasus Sweetmax** is a suitable, moderate starch, high fat feed for providing energy for racehorses.
- **Pegasus Liberty** is a low starch, moderate energy feed that is useful for horses prone to gastric ulceration. **KER Equi-Jewel** is a high fat stabilized rice bran product that increases the energy supplied by fat and fibre, therefore allowing reduced starch intakes. **Pegasus Liberty** contains beet pulp as a highly digestible super fibre and also contains KER BMC™ a powerful gastric acid and hind gut buffer.
- Whilst omega 3 fatty acids are beneficial in most situations, omega 6 fatty acids have been shown to reduce acid secretion in the stomach. For this reason **KER Equi-Jewel**, sunflower seeds and corn oil are preferred fat supplements for these horses.
- To increase energy supplied by digestible fibre by adding highly soluble fibre feeds such as beet pulp.
- Keep concentrate meal sizes small, or intakes slow by including lucerne chaff/hay in grain meals. Feeding up to 5 small meals per day can have a positive impact on ESGUS.
- Antacids and gastric coating agents may provide symptomatic relief and work to maintain the horse's appetite. **KER Neigh-Lox** can act as a buffer and provides a protective stomach coating. **KER Neigh-Lox** can be used for horses at risk of ulceration, after treatment with acid suppression drugs or when these drugs can't be used due to withholding periods.
- Many horses with ESGUS also have abnormal hindgut function so consider the use of **KER EquiShure** hindgut balancer.
- All **Pegasus feeds**, and **KER Triacton**, contain KER BMC™ which is a powerful gastric and hind gut acid buffer and can raise pH above risk thresholds for extended periods
- Keep water available to horses at all times.

MILNE Feeds

Contact our WA based Equine Nutrition Advisor,
Michelle Meylan, 0429 107 790

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Section 2 - Equine Squamous Gastric Ulcer Syndrome (ESGUS)

EGGD is a less common disease than ESGD in many types of horse, but appears to be more common in warmblood performance horses. It is more difficult to treat with conventional acid suppression therapy and 75% cases fail to heal with omeprazole alone.

There is limited information on the risk factors for EGGD and it is occasionally contradictory. Many of the accepted risk factors for ESGD do not apply to EGGD.

Management Recommendations

- Performing exercise more than 5 days a week was found to be a risk factor, so it may be useful to give the horse some days off but remember to reduce the concentrate intake accordingly to avoid risks of other disorders.
- Horses with severe EGGD have been shown to have an increased hormonal response to stressful stimuli, so it may be useful to manage the horse in a way that reduces stress. This could include a diet with the use of fat and fibre rather than starch and sugar as major energy sources. However, it could be that EGGD makes the horse more reactive to stress rather than the other way around.
- Avoid excessive use of NSAID
- There is currently no evidence to show an association between EGGD and diet, but anecdotally access to pasture appears to be protective against EGGD.
- As with ESGD prevention feeding 250g-500g lucerne chaff 30 minutes before exercise ensures the horse does not exercise on an empty stomach. This could be fed with 500g of a low starch high protein concentrate such as **Pegasus Sweetmax** to encourage intake and for additional buffering effect.
- As omeprazole is unlikely to be a successful treatment alone, add oral sucralphate eg **KER Sucralox** in 2 feeds a day. Sucralphate adheres to the mucosa and will provide a physical barrier to acid as well as stimulating protective mucous production, reducing acid secretion, promoting healing and increasing mucosal blood flow
- AS EGGD is an inflammatory condition give 30-60 ml **KER EO-3** to supply long chain Omega 3 fatty acids which research has shown to have an anti-inflammatory effect.

Veterinary Support / Diagnostics

Where possible, consider gastric endoscopy as this is the only definitive way to diagnose EGUS and differentiate ESGD and EGGD. Medical treatment of EGUS such as the use of Omeprazole should be discussed with your veterinarian, and a treatment regime may involve adjustment to overnight hay intake to allow treatment on an empty stomach. EGGD will involve different and longer treatment regimes. Detailed diet advice based on the individual horse is an effective management tool for horses prone to EGUS. Contact Milne Feeds' equine nutrition advisor, Michelle Meylan, on 0429 107 790 or pegasus@milne.com.au for dietary advice.

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