

FEEDING RECOMMENDATIONS FOR HORSES WITH EQUINE METABOLIC SYNDROME (EMS) AND AT RISK OF LAMINITIS

Overview

A combination of calorie restriction, a low carbohydrate diet and exercise is needed to manage metabolic syndrome.

Manage Obesity

Control pasture intake by either using a grazing muzzle or confining the horse to a yard, stable, small paddock or small area of the paddock.

- Exercise the horse at a trot or faster pace (once progress of laminitis allows – do not exercise the horse whilst lameness is present).
- Offer low calorie hay – grass hay or straw are ideal and it is best to look for a late cut, mature stalky hay. Rain damaged grass hay may be suitable provided it is not mouldy. Avoid lucerne, clover or oaten hay.
- Ideally test the hay for energy content, nutrient composition and carbohydrate content.
- Offer 1 - 1.5% of the horse's body weight per day in small feeds e.g. total of 4 – 6 kg per day for a 400 kg horse divided into 3 – 4 meals per day or fed using a slow release haynet or hay feeder.
- Lower intakes will result in faster weight loss, however minimum intakes must be maintained to avoid gastrointestinal problems. Intakes can increase when acceptable weight is achieved.
- A low intake vitamin and mineral pellet or powder should be the only supplementary feed.
- **KER Gold Pellet** is an ideal supplement and is fed at 120g/500 kg B Wt. **KER Nutrequin** is also suitable.
- Thyroid hormone (Thyrol –L) supplementation may help speed up weight loss.
- Be aware not to starve the horse and avoid drastic reductions in feed intake. Horses require a minimum 1% bodyweight in roughage per day to maintain a healthy digestive system.

Manage Insulin Dysregulation (ID)

Reduce body weight and control obesity.

- Restrict starch intake from grains, and sugar intake from pasture, until ID is controlled.
- Select hay with less than 10% non structural carbohydrate content.
- If hay is not tested, soak hay for 30 min in hot water or 60 min in cold water to rinse sugars out. Discard water prior to feeding and feed just after soaking.
- Exercise, metformin, chromium and psyllium may increase insulin sensitivity. Research also supports the use of **KER EO-3** to regulate glucose levels in horses.
- If the horse is not obese but has ID, offer extra calories in the form of fat and fibre. For example ad lib hay, soaked beet pulp, low starch feeds such as **Pegasus Liberty**, and fats e.g. **KER Equi-Jewel**.
- Feed small, frequent meals to avoid major deviations in glucose and insulin concentrations.
- A regular exercise program should be implemented to assist with management of metabolism, reduce regional adiposity and to improve insulin sensitivity.

MILNE Feeds

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

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Prevent recurrence of Laminitis

Horse predisposed to laminitis require effective, ongoing management to prevent recurrence of the condition. Risk factors include periods such as spring-time when pasture is high in fructan content, high sugar hay varieties, grains and sweet feeds.

- Reduce obesity and improve insulin sensitivity by using a combination of calorie restriction, a low carbohydrate diet and exercise is needed to manage metabolic syndrome.
- Restrict horses from pasture at times of the year when it is high in NSC (spring/early summer).
- Manage and maintain hoof health with the help of a Vet and Farrier.
- Feed **KER Bio-Bloom HF** to increase hoof growth and allow more rapid hoof reshaping after a laminitis episode.
- Feed long chain omega 3 fatty acids from **KER EO-3** for a glucose regulating and anti-inflammatory effect without increased calorie intake. Use 30-60ml/500kg.
- Limit exposure to sugars, starches and fructans. Feeds containing greater than 3% molasses and 20% NSC should be avoided.
- Stabilise hindgut pH and bacterial populations by limiting fructan intake from pasture and supplementing with a hindgut buffer **KER EquiShure**.
- Combat oxidative stress by anti-oxidant supplementation with natural vitamin E, such as **KER Nano-E**.
- All **Pegasus feeds**, including **Pegasus Liberty**, and **KER Triacton** contain KER BMC™ which is a powerful gastric acid buffer, and hind gut acid buffer, that can raise pH above risk thresholds for extended periods.

Other Supplementation

- Allow the horse access to rock salt or a salt block.
- Small amounts of chaff may be mixed with supplements to increase palatability and encourage consumption.
- Feed concentrates with a low glycemic index (GI), such as **Pegasus Liberty**, as needed to maintain body condition at a body condition score around 2.5-3/5.
- Super fibres such as beet pulp are excellent low GI feed additives for horses with EMS.

Effective dietary management can significantly improve the welfare of horses suffering with EMS. Detailed diet advice based on the individual horse's situation is often required. Contact Milne Feeds' equine nutrition advisor, Michelle Meylan, on 0429 107 790 or pegasus@milne.com.au for dietary advice.

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