

EXCITABLE BEHAVIOUR IN HORSES

ETIOLOGY

- Horses that are overfed and underworked, particularly when stalled, may exhibit excitable behaviour.
- A large part of the problem can be attributed to the diet and feeding behaviour of the stabled horse.
 - Instead of grazing for 16 to 18 hours per day, the stabled horse may spend as little as 1 to 2 hours per day engaged in feeding activity.
- Long intervals between meals where the horse is confined and idle have been associated with the occurrence of behavioural problems and may also contribute to the formation of gastric and colonic ulcers.
- Many horses in training are traditionally fed large quantities of grain relative to forage components of their ration, in an effort to meet increased caloric requirements, as grains are typically more energy dense than forages.
 - Feeding large amounts of grain in a single meal can lead to starch and sugar overload in the hindgut and can result in serious gastrointestinal disturbances (excessive gas production, acidosis) and metabolic disorders such as colic, laminitis and insulin resistance.
- Grain meal feeding is linked to an increase in serotonin, a brain neurotransmitter that modulates mood, activity and alertness.
 - High serotonin levels observed after eating meals high in starch have been implicated in expressions of behaviour described as sugar “highs” or “hot” seen in some horses following a grain meal high in starch.

SYMPTOMS

- Horses exhibit stereotypic behaviours such as stall walking and weaving, as well as vices such as cribbing and wood chewing, as a means to relieve stress.

DIETARY RECOMMENDATIONS

- To support athletic performance and glycogen repletion after an intense exercise bout, providing highly palatable, energy-dense concentrates with controlled starch and sugar in addition to good quality forage is a viable solution.
- As with any change in a horse’s diet, additions or increases in dietary concentrates should be done gradually, and large daily rations should be broken up into multiple evenly spaced meals, and the size of any given meal should never exceed 0.5% of the horse’s body weight.
- Ingredients like vegetable oils and soluble fibres, most notably beet pulp, and soybean hulls do not contain high levels of starch and sugar and can be blended into the ration to help increase its digestible energy/caloric intake without increasing the risk of starch and sugar overload.
- Fats and fibres do not result in large increases in blood glucose. Therefore, rations where the total dietary (hay or forage + grain or supplement products) DE comes predominantly from fat and digestible fibre help decrease the occurrence and degree of excitable behaviours associated with the diet, and grain concentrates in particular.

SUGGESTED PURINA PRODUCTS:

FEED NOTES:

- Minimize starch and sugar intake by utilizing fats and soluble fibre as safe sources of calories/energy that do not produce a high glycemic response.
- The addition of Horse Plus (B1 complex) helps regulate energy levels and promotes concentration.
- A horse with a nutritional deficiency or receiving a diet that is not well balanced (below recommended levels) is often more easily excitable.
- **VERY IMPORTANT:** Check the horse's level of hydration. Inadequate hydration is often the cause of excitability.

Recommended:

**SUPERFIBRA PLUS
SUPERFIBRA ULTRA
SUPERFIBRA INTEGRI-T
EQUILIBRIUM TRIMAX**



Alternatives:

**EVOLUTION SENIOR
EVOLUTION ELITE
EVOLUTION MATERNITY**



Alternate choice:

SUPERFIBRA CLASSIC



Add 30 to 60 grams of salt to the daily ration depending on the horse's hydration.

Supplement: The addition of **HORSE PLUS**, a fortified vitamin B supplement is recommended for this condition as it promotes focus and the metabolism of energy.

NOTES: A veterinary exam is recommended for anxious or excitable horses to eliminate possible medical conditions that could cause such behaviour.

These preliminary measures will help choose the appropriate feed from Purina's line of products.

When choosing a feed, consideration should be given to the horse's temperament and use (sport, pleasure, riding school, etc.) as well as the horse's body condition.

FEED RATE PROTOCOL NOTICE

This feeding protocol described here pertains only to Cargill Limited Horse Feeds. There is not established feeding protocol that all feed companies must follow. Purina provides two feeding rates on their tag a "Minimum" and a "Purina Superior". The "Minimum" meets the levels established by the NRC Nutrient Requirements of Horses (2007), which will prevent all classic nutritional deficiencies. The "Purina Superior" is a greater level of fortification that promotes an optimal level of performance and immunity. By no means does that imply "Minimum" is subpar, and for the non-competitive horse, that stays home year round and has no health issues there is probably no need to exceed this level. However, if you are feeding a true equine athlete, with all the immune stresses associated with that level of competition, then the "Purina Superior" level is paramount to ensure an optimal level of performance and immunity.