

EQUINE PROTOZOAL MYELOENCEPHALITIS (EPM)

ETIOLOGY

- Equine Protozoal Myeloencephalitis is a common neurological disease. In the late 1980s, the organism was identified as *Sarcocystis neurona* and an antibody test was developed.
 - *Sarcocystis falcutula* has also been identified as a potential cause of the condition.
- *Sarcocystis neurona* is now known to be present throughout the Western Hemisphere. The opossum has been determined to be a host within the cycle, with birds acting as intermediaries for the parasite. The incubation period for the disease is unknown.
- Diagnosis of EPM is based upon finding antibodies or, more recently, a DNA detection test from either blood or cerebrospinal fluid.

SYMPTOMS

- EPM affects different neurons throughout the nervous system and can result in dragging or spastic gaits.
 - One side of the body may be affected, but not the other.
 - If it affects the cranial nerves, the horse may have problems eating or drinking, have facial twisting, or undergo changes in the position of the eyes and ears.
- Severely affected horses may become recumbent and have seizures.

MANAGEMENT RECOMMENDATIONS

- Exercise should continue to prevent atrophy so long as the horse is not a threat to itself or its handlers/riders.
- Turn out horses recovering from EPM alone or with a nonaggressive horse, weather permitting.

DIETARY RECOMMENDATIONS

- Controlled starch and sugar, high (soluble) fibre and added fat are indicated since there is an increased incidence of digestive disturbances (diarrhea) as a side effect of treatment.
- Supplemental folic acid and vitamin E have been found to aid in nerve healing and should be included in the daily regimen.
- High-quality, highly palatable forage should be fed to help support maintenance of body condition and prevent excessive weight loss.
- High-quality protein (essential limiting amino acids) is required to help rebuild damaged nerve and muscle tissue.

SUGGESTED PURINA PRODUCTS:

FEED NOTES:

- A low starch and sugar, high fibre and added fat diet is indicated.
- Provide for high-quality proteins (amino acids), folic acid and vitamin E to help rebuild nerve and muscle tissue.
- Consider the use of a vitamin B supplement containing folic acid and cobalamine. These nutrients have been shown to influence the recovery of the equine nervous system and the quality of nerve impulses in horses.

Recommended:

EQUILIBRIUM TRIMAX
EVOLUTION ELITE
EVOLUTION SENIOR
SUPERFIBRA INTEGRI-T



These choices fully meet dietary recommendations for this condition and are strongly recommended. Their 5:1 omega-6 to omega-3 ratio is a strong aid in the management of this condition. These feeds also contain **HORSE PLUS**.

Look for feeds containing Horse Plus or add this supplement to the ration to maximize folic acid, vitamin E and vitamin C intake.

If the daily ration does not meet the Purina Superior recommendations, the addition of **EQUILIBRIUM EQUILIZER** or **OPTIMAL** is indicated to balance the vitamins and minerals. Optimal is preferred to improve the horse's protein intake.

For this condition, it is critical to follow the Purina Superior recommendations (that are higher than the NRC recommendations).

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.