

Questions and Answers

BY STEPHEN DUREN, Ph.D.

My horse was diagnosed with equine protozoal myeloencephalitis (EPM) last year. He has been treated medically by my veterinarian for the last four months. Can I do anything nutritionally to continue to help my horse recover?

Most horses with EPM have spinal cord damage that leads to incoordination, stiffness, and weakness, which in turn may cause muscle atrophy or wasting. Conventional treatment for EPM is oral administration of drugs classified as folic acid inhibitors. These drugs are designed to prevent folic acid production in the protozoa responsible for the disease. Folic acid deficiency results in the death of the protozoa. Drugs that prohibit folic acid production do not seem to cause a deficiency in the horse; therefore, supplementation may not be necessary. If folic acid is to be supplemented, it should be given several hours apart from the drug to prevent interference with drug absorption.

The influence of nutrition on healing of spinal cord damage and subsequent muscle atrophy is not documented. Nutritional support with vitamin E has been recommended for horses with EPM. Horses should receive 7000 IU of supplemental vitamin E per day. In addition to vitamin E, the diet should be properly fortified with the essential amino acid lysine and adequate total protein to aid in muscle regeneration.

How many times a day should horses be fed?

In a free-roaming situation, horses graze throughout the day and night. Trying to mimic this natural feeding behavior is a good idea. Horses that are confined to stalls or small drylots should be fed at least two times per day, ideally with enough hay so that they can continually pick at it between feedings. For overweight horses, less hay should be provided at each feeding. Be careful not to restrict hay below 1% of body weight as too little fiber can lead to digestive upset. Horses that are in strenuous training may need to be fed the grain portion of their diet three to four times per day to keep meal sizes small.

How much feed should be fed to a horse in a single meal?

The grain portion of the diet should be digested in the small intestine of the horse. When large amounts of grain are fed in a single meal, the small intestine cannot digest and absorb it all. Unfortunately, leftover grain is dumped into the hindgut (cecum and colon) and fermented rapidly, forming acid and gas. These two products of fermentation can cause damage to the gut and can lead to colic and laminitis. To minimize the amount of grain

reaching the hindgut, no more than five pounds of grain should be offered to a 1,000-pound horse at any one meal. If larger amounts of grain are required on a daily basis, the grain should be divided into two or more smaller meals.

How can I tell if my horse is choking, and what can I feed to keep him from having this problem?

Choke is an obstruction of the esophagus and can be caused by almost anything a horse eats. Horses with choke often have saliva and wet feed material streaming from their nostrils. These horses will make gagging sounds and act distressed, frequently standing with their heads and necks stretched out in an effort to relieve the blockage. Repeated swallowing may relieve the blockage, but if this fails, a veterinarian should be called to assist in clearing the esophagus.

Horses have been known to choke on hay, pelleted feeds, textured feeds, and treats such as apples and carrots. The main reason horses choke is rapid consumption of feed; they simply do not chew and moisten the feed properly prior to swallowing. Slowing the aggressive eater will often prevent further choke episodes.

Can feeding large amounts of alfalfa pellets cause an impaction in the horse?

If proper management strategies are in place, feeding large amounts of alfalfa pellets should not be a problem. Any feed material can cause a digestive impaction if it is consumed rapidly. Many horses are safely fed diets consisting solely of alfalfa pellets without problems. However, poor quality alfalfa pellets or a rapid change to an alfalfa pellet diet can contribute to colic symptoms.

What do people mean when they refer to "foreign material" in hay?

My definition of foreign material is anything that cannot outrun the baler. This would include paper, plastic, aluminum cans, insects, rodents, and snakes to name a few. Any of these materials would make the hay unacceptable for horses. Foreign material can also mean weeds or other plants that are not intended to be in a particular type of hay. For example, grass or weeds are not supposed to be in pure stands of alfalfa. Some weeds can be toxic if fed to horses. It is always a good idea to carefully inspect hay for foreign material when it is purchased and to examine it again when it is fed to horses. ☺

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Cuero, TX 77954
361-275-5711
361-275-2475 FAX

4542 Rigsby Road
San Antonio, TX 78222
210-648-0141
210-648-2135 FAX

Aslin Finch

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P.O. Box 7
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502-747-8960 FAX

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Aiken, SC 29803
803-641-0007
803-502-0600 FAX

Bartlett Milling Co.

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704-873-8956 FAX

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717-272-7009 FAX

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905-985-8297 FAX

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Lexington, KY 40510
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859-254-5722 FAX

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859-236-7307 FAX

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414-767-2026 FAX

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801-392-2498 FAX

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540-825-2210 FAX

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859-255-9815 FAX

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204-235-1260 FAX

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Czech Republic
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011-42-446-613-267 FAX

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651-463-8041

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Tunbridge Wells,
Kent TN30NG
United Kingdom
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