



## Feeding older horses

***It's no secret that the population of older horses appears to be increasing, with many of these horses continuing to be active well into their twenties.<sup>1</sup> As your horse ages, they may become less efficient at digesting protein and fibre with the result that the absorption of vitamins and minerals, particularly phosphorus, can be reduced.<sup>2</sup> This means that you must consider modifications to their diet to ensure that they receive all of the necessary nutrients to keep them in good health. A balanced diet that combines plenty of good quality forage with a low starch concentrate feed, supplemented with an adequate supply of highly digestible quality protein, is pivotal to good health and ensures that older horses can enjoy a long, healthy life.***

Factors such as worming history, dental condition and the horse's health status can all have an impact on the efficiency of digestion and absorption of nutrients from their diet. If your horse has had worm infestations before, this may have resulted in damage to the gut which may have a negative impact on digestive efficiency. Likewise, as horses age, their dental health can decline resulting in sharp, worn, loose or missing teeth meaning that they may find chewing more difficult further reducing their digestive capacity. Older horses can also develop diseases such as Cushing's disease (PPID) or laminitis which will also influence their dietary requirements.

Protein is an important part of your horse or pony's diet. It provides a vital source of amino acids which are the building blocks of protein manufacture and repair in every cell of the body. Twenty-one different amino acids exist, and whilst some of these can be made by the body (non-essential amino acids), others cannot so must be provided in the diet (essential amino acids).

### ***Why should the level of protein fed to older horses be increased?***

As your horse gets older they are likely to need a higher dietary protein intake compared to their younger companions to compensate for the reduced efficiency of digestion.<sup>2</sup>

It is important that dietary protein is readily digestible.<sup>3</sup> Enzymes, found in the small intestine, are needed to break up the complex structure of dietary protein in order for it to be absorbed. This process can become much more inefficient with age.

There are a number of amino acids, such as lysine, that cannot be synthesised by the horse and must be supplied in its diet. Commonly-used feedstuffs such as oats, barley and sugar beet are not a good source of essential amino acids and so supplementation of your horse's diet with a product such as Equitop Myoplast can be a great support for protein metabolism in older horses. Supplementing your horse's diet with a ready supply of bioavailable amino acids – such as Equitop Myoplast – can help support protein metabolism in older horses.

### **Why is muscle mass and tone often reduced in older horses?**

As horses grow older they are likely to undertake less exercise and this, combined with age-related changes, may lead to a gradual decline in muscle tone and mass.

At this later stage of life, it becomes even more important to ensure that your horse's nutrition accurately reflects their dietary requirements, not just in terms of volume, but also in balance and quality. Age-related reduction in the absorptive capacity of the gut also has to be considered when building a ration for your horse.

Ensuring your horse has a balanced supply of high quality and bio-available amino acids in their diet can help support the maintenance of good muscle mass in older horses, and supplementing their feed ration with Equitop Myoplast can help achieve that goal.

### **Why does forage for older horses need to be chosen carefully?**

Maintaining adequate forage intake can be problematic in older horses where dental health may be compromised or where underlying respiratory disease is present. Despite this, forage is an important feature in your horse's diet as it helps to maintain digestive health and contributes to your horse's overall wellbeing.<sup>4</sup> Evidence suggests that your horse may be more likely to develop respiratory allergies as they get older, including recurrent airway obstruction (RAO) (formerly COPD).<sup>5</sup> Good quality clean hay is therefore important to maintain respiratory health. If you notice that your horse is finding chewing difficult perhaps due to poor dentition, soaked or steamed hay can be easier, or short chop alfalfa can even be used to replace part of the hay allocation. When your horse or pony has lost many of his teeth eating hay is sometimes no longer possible and so other fibre sources such as soaked sugar beet, or high fibre cubes can also be useful to ensure adequate fibre intake.

### **How can you ensure your older horse receives enough energy in their diet?**

Even though your horse may still be being exercised regularly and may be competing, they are unlikely to need a ration that is high in carbohydrate or starch rich cereals.<sup>2</sup> Concentrate feeds that are high in digestible fibre and oil are often more appropriate for older horses as their level of exercise is reduced. Oil can provide your horse with more than twice as much energy per kg than carbohydrate from starches, which helps to maintain their overall body condition. Oil is made up from fatty acids and certain fatty acids have been suggested to have a range of benefits in supporting good health in older animals.

### **Why may antioxidants be of help for older horses?**

Free radicals are highly biologically active by-products of many normal metabolic processes, however they are also implicated in the progression of numerous ailments including respiratory and inflammatory joint disease. Ensuring a rich supply of dietary antioxidants is good practice in older horses, as antioxidants are thought to help balance against the damaging effects of free radicals on tissues. A complex mixture of antioxidants are found naturally in plants and vegetables. Feed ingredients such as alfalfa, rosehip and ricebran contain a complementary mix of natural antioxidants which can be beneficial to your horse as part of a balanced diet.



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