

Autumn and Winter Feeding

Dr Catherine Dunnett BSc, PhD, R.Nutr, provides advice on feeding your horse during the autumn and winter months

Autumn is a period of great change for most horses and ponies, in terms of their management, diet and environment. Good management during this period is so important to help maintain health. Winter can be a troublesome time with respect to feeding. Weight loss, digestive disorders, respiratory problems or autumn laminitis are a concern for some horse or pony owners. For many horses and ponies, as the amount of daily exercise is reduced and the routine changes towards being stabled at night, it is sometimes difficult to get the feeding balance right.

Maintaining bodyweight

Traditionally, autumn has been associated with a seasonal peak in the number of cases of laminitis, as we experience a second flush of grass growth. Many ponies and also some horses are at risk from laminitis and extreme care is needed to avoid this occurring. Bodyweight should be maintained throughout the year, as fat animals appear to be at high risk of laminitis. Recent evidence suggests that this may be contributed to by the development of insulin resistance. Insulin is needed to efficiently distribute glucose to the cells and tissues of the body including the hoof and this process is disturbed when the cells of the body become resistant to the effects of insulin. Despite this, there are a number of feed and management factors, which can help to reduce the likelihood of laminitis:

- Maintain appropriate body weight
- Restrict access to grazing
- Feed a high fibre, low starch and sugar ration
- Regular exercise
- Feed a balanced diet in terms of vitamins and minerals
- Seek advice on feeding from a good nutritionist



Digestive health

Digestive disorders such as colic are also a worry, particularly at this time of year, as generally the autumn brings a change in routine and often a significant change in diet. At this time of year, many horses and ponies will be ridden less and they may be partially or completely stabled for the winter. A wet grass-based diet is often replaced with conserved forage, such as hay or haylage, which contains much less water. This is accompanied in some cases by the introduction of high starch containing concentrate feeds. Some newly stabled horses or ponies may also eat their beds when they are housed on straw.

Whilst most of these dietary and environmental changes will benefit horses and ponies over the winter months, the transition period heightens the risk of colic. Again, there are a number of steps that we can take to help maintain digestive health during this period of change.

- Water should always be plentiful, clean and freely available to ensure fluid intake is maintained.
- Make any changes to feed or forage slowly over a period of 3-5 days.
- Introduce new feeds or forage in the field before switching to the stable.
- For chronic bed eaters, an alternative bedding material such as shavings, rubber matting or paper should be considered.
- Digestive aids containing live yeast and or pre-biotics (FOS) can be given.

Loss of bodyweight and condition is also a frequent finding during the autumn and winter months. Energy expenditure increases as the weather deteriorates and older horses particularly may drop off in condition at this time of the year. As the level of exercise falls, it is sometimes difficult to achieve an appropriate feed intake to maintain bodyweight and condition. Here are some tips to help you achieve this.

- Pay attention to worming and teeth condition.
- Use of rugs both indoors and out will help to conserve energy supply.
- Good quality forage is needed as grazing begins to decline.
- Use appropriate concentrate feeds to boost daily energy intake.
- Feed concentrate meals on a little and often basis to promote good digestion.
- High oil ingredients such as vegetable oil, micronized linseed or rice bran are a valuable source of extra 'calories'.



Respiratory health

Finally, whilst forage is essential for most horses and ponies during the winter, it can also be a real cause for concern regarding respiratory health. Forage and bedding are a significant source of allergens that can contribute to the onset, or exacerbate the existing presence of, respiratory disease such as recurrent airway obstruction (RAO) or inflammatory airway disease (IAD).

Moulds, yeasts, dust and mycotoxins are all elements that can cause problems. Mycotoxins are harmful substances that are produced by moulds, which can be found in feed, forage and bedding and can contribute to many health issues including respiratory disease. Unfortunately, our knowledge of the relative risk of exposure of horses to mycotoxins and their potential deleterious effects is currently inadequate and needs to be improved through ongoing surveys and research. Analysis of mycotoxins in feed and forage is beyond the scope of most horse owners, as it is prohibitively expensive. The use of additives called mycotoxin binders that remove mycotoxins from the gut, rendering them less harmful, is an area for further exploration.

Certainly, for animals with pre-existing respiratory problems a minimal dust environment is paramount, and some would argue that wintering outdoors is the best policy. Given our harvesting climate, well-made haylage offers many advantages over hay in the UK. The anaerobic fermentation process involved in making haylage inhibits mould and yeast growth. However, haylage does need to be used relatively quickly once opened and exposed to the air.

Choosing hay can be more problematic but dry harvesting and storage conditions are desirable and for those that are able to buy a significant batch size, a laboratory analysis of moulds and yeasts is helpful. Soaking hay can also be useful, as it reduces the inhalation of moulds and spores and may also reduce the mycotoxin burden. Total submersion in water for a period of 20-30 minutes is advisable and the hay must be fed before it dries. New commercial hay steamers are now available, which can also help achieve cleaner forage.