

## Caring for Older Horses

Thanks to advances in equine nutrition and veterinary care, horses in the UK are not only living longer but also remaining active well into their 'teens'. Older horses can be great schoolmasters and although they are more susceptible to certain conditions there is no reason why they cannot remain fit and healthy. As a result Petplan Equine will now insure horses up to the age of 25 as long as the policy is taken out before they are 20. Graham Potts MRCVS, partner in the Three Counties Veterinary Practice, outlines some conditions to be aware of in older horses and ways in which they can be prevented, while equine nutritionist Dr Catherine Dunnett PhD talks about feeding older horses to keep them in good health.



### The Veteran Horse - Important Health Considerations

As horses age their bodies change externally, developing the characteristic appearance of an old horse, but their internal systems also alter with time. As a result veteran horses have different management and feeding requirements and are susceptible to a range of health problems rarely seen in younger animals. In addition, older animals may have a less competent immune system, often as a result of Cushing's disease, which means they are less effective at fighting infections.

### Management

Providing shelter and good rugs during bad weather is particularly important for elderly horses. Older horses often suffer from weight loss resulting in less fat to insulate themselves in cold or wet weather. Providing extra protection reduces energy losses and helps to prevent further loss of condition. It is good practice to measure your horse's weight on a monthly basis and commercially available weight tapes provide a reasonable estimate. It is also important to monitor water intake, appetite and the appearance of droppings as any change from the norm may indicate a problem.

### Worming

Older horses require worming in the same way as their younger counterparts and in some cases their immune systems may not be as strong leading to an increase in susceptibility to worms and thus higher worm burdens. Worm egg counts can be calculated from faecal samples to monitor the efficacy of your worming programme and tapeworm burden can be assessed by a blood sample.

## Vaccinations

Although an older horse may have been retired from competition life it is important that a vaccination programme to protect against equine influenza virus and tetanus be maintained.

## Foot care

Regular farriery remains important in horses of all ages. If the feet are allowed to become long then cracks are likely to appear which can lead to foot abscesses. When the toes are relatively short the breakover point is brought back making movement easier. This is especially helpful if the horse suffers from arthritis. Horses with Cushing's disease are prone to laminitis and these animals will require regular foot trimming and may need special shoes such as heart bars to support the pedal bone.

## Teeth

The horse has two main functional groups of teeth, the incisors at the front of the mouth, which are used to grasp food, and the cheek teeth consisting of premolars and molars, which grind this food. Unlike in humans, equine teeth continually erupt from the roots, and are at the same time ground down during the action of chewing. As horses get older, usually in their 20s or 30s, the eruption process slows down and cannot keep up with tooth wear leading to a reduced crown and an increasingly smooth surface (known as a smooth mouth) which is less effective at grinding food. Affected horses often lose weight as a result of being unable to chew grass and forage adequately and may drop partially chewed food out of the mouth. This is known as 'quidding'.

Other dental problems also become more common. These include loose or missing teeth, fractured teeth and gaps between teeth, known as diastemas. Most veteran horses require more frequent dental treatment than when they were younger, and their teeth should ideally be checked every six months. In addition, if weight loss, difficulty or discomfort when chewing, pouching of food within the cheeks, quidding or a bad smell from the mouth are noticed then prompt dental attention is required.

## Cushing's Disease

Cushing's disease is a common condition of older horses caused by a small benign tumour of the pituitary gland in the brain. Cortisol levels are elevated and this causes a diverse range of symptoms, the most serious of which is laminitis. Other symptoms include a long curly coat, which is not shed in the summer, excessive sweating, lethargy, a loss of muscle especially over the back, a pot bellied appearance and increased drinking and urination.

Diagnosis is often possible based on the clinical signs alone. There are a number of blood tests, including measuring ACTH levels, which can confirm the diagnosis.



Treatment may not be necessary in mild cases but should be instigated where the side effects are causing problems for the horse e.g. laminitis. Several medical treatments are available including pergolide, cyproheptadine and trilostane and your vet will be able to advise you which of these is the best option for your horse. Simple management measures such as regular clipping, including during the summer to reduce sweating, will make the horse more comfortable.

## Weight loss

Weight loss is common amongst elderly horses and the causes are numerous but the most common is insufficient food intake, either due to inadequate good quality food or because the horse is unable or unwilling to eat enough calories.

Investigation of weight loss should always include a clinical examination and a dental check. Your vet may suggest blood tests to investigate organ function. The worm burden should also be checked by a faecal worm egg count and the worming programme addressed if necessary.

As horses age their gut becomes less efficient at absorbing nutrients and this is known as malabsorption. Gut function can be assessed by a glucose absorption test and some cases of malabsorption can be controlled with the use of corticosteroids. Your vet will be able to advise.

Liver disease also occurs with increasing frequency in older horses and can produce weight loss along with many other signs, which will be discussed in the section below on liver disease. Investigative procedures may include abdominal ultrasound and liver biopsy.

Treatment of all cases of weight loss is likely to involve dietary modification to provide energy dense food.

## Colic

Colic occurs in all ages of horse but certain types are seen with increasing frequency in aged horses. Small intestinal obstructions caused by benign fatty tumours known as Pedunculated Lipomas often occur in older horses and these require surgical intervention as the colic is often life threatening.

Some forms of colic are provoked by high worm burdens, inadequate chewing of food as a result of dental problems or changes in management routine or feeding. Therefore it is important to provide regular worming and dentistry for your horse and to avoid sudden changes in diet.

## Liver disease

Liver disease is relatively common in older horses and has many different causes. There are numerous symptoms including weight loss, dullness, lethargy, loss of appetite and jaundice. In some horses white areas of skin become unexpectedly sunburnt (photosensitisation).

A number of diagnostic tests are usually required to investigate the type and severity of liver damage present. These include blood tests, ultrasonography of the liver and in some cases a liver biopsy.

Treatment depends on the original cause, but may include antibiotics, corticosteroids and oral or injectable vitamin supplements. The diet should be modified to put less strain on the liver by reducing protein content and increasing the carbohydrate level.

## Arthritis

Few horses in their advancing years escape arthritis. The disease can occur in any joint, but is most common in the hocks, knees and lower joints of the legs. Affected horses often appear stiff when turned out in the morning or after lying down. They generally loosen up after walking around, and are often better in warm weather than in cold damp conditions.

Many horses will benefit from daily oral anti-inflammatories, such as phenylbutazone, and joint supplements may provide additional benefits. Avoiding long periods of stabling will help prevent horses from stiffening up, and whilst stabled the provision of plenty of bedding will enable the horse to be comfortable when lying down and make it easier for him to stand up again. Horses should not be allowed to become obese as this puts additional strain on the joints.

## Circulation

Heart murmurs, which are caused by blood leaking through the heart valves, become more common in older horses. Many murmurs are of no significance, but a small proportion can have serious consequences and your horse should have his heart checked regularly, especially if still being ridden. More serious circulation problems can cause signs such as a low exercise tolerance, lethargy and weight loss. Fluid swellings, known as oedema, can also develop on the underside of the abdomen, chest or in the lower limbs. Investigative techniques include an electrocardiogram (ECG) or echocardiography (ultrasound scan).

## Feeding

Older horses and ponies have some specific nutritional requirements due to a decline in the efficiency of digestion. This may simply be the result of age, or can be due to cumulative worm damage to the intestines. Attention to basic health including strategic worming and regular dental attention can help to ensure that this decline is slowed.

One of the greatest issues for older horses and ponies can be maintaining bodyweight. They may require additional hard feed to supplement their grazing and forage especially during the winter months. If your horse has difficulty maintaining weight it may be useful to choose a high fat diet or add vegetable oil to the ration to increase the energy density.

When teeth are in good order, plenty of quality forage or grazing will help to maintain an adequate energy or 'calorie' intake. However, dental problems can make grazing and chewing forage difficult and high fibre cubes, sugar beet and chopped alfalfa chaffs are a useful alternative. High oil feeds can also be used, as they are more energy dense. Vegetable oils including corn, soya or sunflower oil can alternatively be added to the ration. Other high oil ingredients such as rice bran or micronized linseed could alternatively be top dressed onto the existing ration to increase the daily energy or 'calorie' intake.

Early research suggests that older horses have a higher daily requirement for protein compared to their younger counterparts. The protein provided must be easily digested and provide a good profile of the constituent amino acids. Soya is a source of good quality protein that is commonly used in veteran feeds. The absorption of phosphorus can also be reduced in older horses and ponies due to deterioration in hindgut efficiency. Feeds designed specifically for older horses and ponies therefore take into account these extra needs.

Many veteran horse feeds will also contain live yeast (*Saccharomyces cerevisiae*), which supports hindgut function by helping to maintain a beneficial environment for the growth of beneficial bacteria involved in the fermentation of fibre and the release of phosphorus from plant based ingredients.

Antioxidants are also very important micronutrients in the diet of older horses and ponies, as they help to protect against the damaging effects of reactive oxygen species (ROS) that are produced as a by product of normal metabolism. ROS can damage cells and tissues and are also actively involved in the inevitable degeneration process that occurs with age.

The body's antioxidant defences are generally reduced in old age and adequate antioxidant intake is more important at this stage of life. The major dietary antioxidants include vitamin E and vitamin C, as well as beta carotene and the trace minerals copper, zinc, manganese and selenium. These are needed for the function of some important antioxidant enzymes within the body.

The most difficult question to address with respect to older horses and ponies is when they should be considered to be old and require a specific diet. The answer is not very straightforward, as it will largely depend on the individual horse or pony. However, as a guide, if your horse or pony is looking well, in good condition and is healthy on their existing feed, then a specific ration tailored to the older horse or pony is probably not required as yet. Although in older animals where maintaining condition is more difficult, or where a specific health issue is identified, then tailoring the diet to the needs of the older equine is prudent.

## TOP TIPS FOR CARING FOR OLDER HORSES

- Have them regularly checked over by a vet
- Check their teeth at least twice a year
- Watch out for signs of the horse having problems eating
- Make sure they are warm whether inside or out
- Keep vaccinations and wormers up to date
- Watch out for any general signs of discomfort
- Be extra vigilant about keeping rugs in good condition and waterproof
- Make sure that there is a field shelter and it is warm and dry.