EXCELLENCE IN PRACTICE

www.xlvets.co.uk

EQUINE review

SPRING 2010

EQUINE METABOLIC SYNDROME

GASTRIC ULCER AWARENESS

FEEDING THE LAMINITIC HORSE

LAMINITIS awareness MONTH

APRIL 2010

pony pages

FOR OUR YOUNGER READERS

xl vets

Excellence in Practice

Laminitis is an inflammation on the sensitive laminae in the horse's feet. This is a very serious condition and can be caused by a range of factors. Is your horse at risk of laminitis?

Contact your XLVets practice to find out more about our Laminitis Awareness Month

XLVets
Excellence in Practice

SPRING 2010
XLVETS EQUINE REVIEW

SIXTH EDITION

XLVets is a novel and exciting initiative conceived from within the veterinary profession. We are all independently owned, progressive veterinary practices located throughout Great Britain committed to working together for the benefit of our clients.

Our intentions...

Our vision is that by sharing experience, knowledge and skills we can deliver the highest standards of service and care to all our clients. As members of XLVets, we have worked hard to create a model of how veterinary practices can work together as an extended national team, sharing the latest ideas and passing on the benefits that arise to all our clients.

XLVets Member Practices

608 Vet Group
Allen and Partners
Alnorthumbria Veterinary Group
Ardene House Veterinary Hospital
Belmont Veterinary Centre
Bishopton Veterinary Group
Cain Vet Centre
Calweton Veterinary Practice
Castle Veterinary Surgeons
Chapelfield Veterinary Partnership
Cliffe Veterinary Group
Clyde Veterinary Group
Drove Veterinary Hospital
Endell Veterinary Group
Farm First Veterinary Services
Fenwold Veterinary Centre
Friars Moor Veterinary Clinic
Glenthorne Veterinary Group
Hook Norton Veterinary Surgeons
Kingfisher Veterinary Practice
Kingsway Veterinary Group
Lambert, Leonard & May
Larkmead Veterinary Group
Macpherson O'Sullivan Ltd
Millcroft Veterinary Group
Minster Veterinary Practice
Northvet Veterinary Group
Paragon Veterinary Group
Parklands Veterinary Group
Penbode Veterinary Group
Rosevean Veterinary Practice
Rutland Veterinary Centre
Scarsdale Veterinary Hospital
Scott Mitchell Associates
Shepton Veterinary Group
Southfield Veterinary Centre
St Boniface Veterinary Clinic
Thrums Veterinary Group
Tyndale Farm Veterinary Practice
Wensum Valley Veterinary Surgeons
Westmorland Veterinary Group
Willows Veterinary Group
Wright & Morten

www.xlvets.co.uk

Welcome

XLVets practices are keen to promote equine preventative healthcare initiatives. Last year we held a very successful dental awareness month; in April 2010 we would like to highlight the problems associated with Laminitis.

Laminitis is a serious disease that affects many horses and ponies in the UK. In this issue we look at Metabolic syndrome and feeding the laminitis prone horse. April 2010 will be XLVets Laminitis awareness month. Many XLVets practices will be holding talks on the subject. If you have concerns about laminitis or other topics raised in this issue please ring your local XLVets practice

Wendy Furness MA VetMB CertEP MRCVS
Scarsdale Veterinary Hospital

FEATURED in this issue...

What are equine gastric ulcers? 'Equine Gastric Ulcer Syndrome' describes the erosion of the horse's stomach lining, due to the prolonged exposure to the acid produced by the stomach. Gastric ulceration is a common, serious condition that can be fatal in foals and can also seriously affect an adult horse. Despite negatively affecting appetite, temperament and overall health, Equine Gastric Ulcer Syndrome remains an under-diagnosed complaint.

The signs of gastric ulcers can be vague and vary from one horse to another and whilst it's generally known that around 90% of racehorses in training have ulcers, it's perhaps less well known that about 60% of performance horses and 40% of leisure horses are also affected.

IS YOUR HORSE SUFFERING FROM GASTRIC ULCERS?

HOW AND WHY ULCERS FORM

Horses were designed as 'trickle feeders' with free access to light grazing. In contrast, depending on the level of work and yard regime, our modern horse in work is usually stabled, often with restricted access to food.

Whilst, like humans, horses produce saliva when they eat, an important feature of equine ulcers is that horses secrete gastric acid continuously in the stomach, whether or not they are eating. An adult horse will produce approximately 1.5 litres of gastric acid per hour and with restricted access to food, continued secretion means the pH level can rapidly become very acidic and ulcers can begin to develop.

In contrast, horses constantly eating hay or grass have a higher average stomach pH providing a much healthier environment. It can take up to 24 hours for the adult horse's stomach to empty completely after a forage meal, whereas a cereal based diet will pass through much more quickly.

WHAT ARE THE RISK FACTORS?

A variety of factors may increase the risk of gastric ulcers; these include the diet, physical stress and illness associated with transportation, relocation or stable confinement, and medication such as NSAIDs as well as exercise.

ADDITIONAL FACTORS

Research has also shown that regular exercise and training has an effect on stomach acid levels. Exercise increases the pressure in the stomach and decreases the gastric pH. Exercising on an empty stomach can exacerbate this.

In addition to the feeding regime and exercise, other factors that can influence the formation of ulcers are transportation, relocation, hospitalisation or separation from their usual group[1]. The use of anti-inflammatories has also been shown to be a possible contributing factor to the formation of equine ulcers[2].

DIAGNOSIS AND TREATMENT

If a horse is suspected of having gastric ulcers, a gastroscopy using a video endoscope will confirm the presence, severity and location of the ulceration. Although the most common location for ulcers is the upper region of the stomach, they have been known to develop in other areas, including the duodenum.

Ulcers are graded from 0 to 4, reflecting the severity of ulceration. Grade 0 is a normal healthy stomach, and grade 4 demonstrating extensive lesions with areas of deep ulceration. A 28 day course of the prescription medicine containing omeprazole has shown to be the most effective treatment for gastric ulcers. After completion of the treatment, the horse is then usually re-scoped and in most cases the ulceration will have healed.

RECURRENCE AND PREVENTION

Many owners and riders note a significant improvement in their horses, sometimes within days of treatment commencing. However, once the ulcers have healed, unless changes are made to the horse's management, training and/or environment, it's very possible that they will recur. For a horse in hard work, ulcers can start to reappear as quickly as three to four days after the end of treatment, however even subtle changes to their daily regime can make a difference.

We should try to emulate the horses' natural environment as closely as is possible. Free access to hay and daily turnout - even for short periods - can help significantly, as can splitting hard feeds into smaller quantities fed more frequently i.e. the same total amount given in four instead of two feeds.

Studies have also shown that travel, and separation from peers are also high risk factors for gastric ulcers. In addition to management modifications, or where risk factors cannot be avoided, your veterinary surgeon may recommend that horses receive a preventative daily dose of omeprazole to keep them clear of ulceration.

MAY 2010 GASTRIC ULCER AWARENESS MONTH

THE MONTH OF MAY 2010 IS GASTRIC ULCER AWARENESS MONTH (GUAM) for the 4th year running and the XLVet member practices are committed to supporting this initiative. GUAM is sponsored by Merial Equine Health and the objective is to increase the awareness and understanding of what is possibly one of the most under-diagnosed problems in the equine field.

HOW DO I KNOW IF MY HORSE IS SUFFERING FROM GASTRIC ULCERATION?

The signs of a gastric ulcer can be very difficult to recognise, but they may include one or more of the following:

- Poor appetite
- Weight loss
- Poor performance
- A dull coat
- Behavioral changes or depression
- Mild or recurrent colic

Free 'risk assessment' web tool helps you help your horse

Answering a simple questionnaire may help to determine your horse's potential risk of gastric ulcers. Visit www.gastriculcerrisk.co.uk to take part and find out more about the disease, its prevention and treatment.

Once you have received your horse's potential risk level by email, print it out and take it in to your local XLVets practice to discuss the findings of this risk assessment with us, as gastric ulceration is a serious condition

[1]McClure SR, Carithers DS, Gross, SJ, Murray MJ. (2005)
[2]MacAllister CG, Morgan SJ, Borne AT, Pollet RA. (1993)

Case Study

GASTRIC ULCER

Keano is a 7-year-old thoroughbred belonging to the Weymouth family from Great Salkeld, Nr. Penrith, in Cumbria.

LIZ JACKSON, Paragon Veterinary Group

Prior to his purchase in September, he had been used mainly for Pre-Novice eventing but since moving to his new home he had been in light work. Keano was normally turned out for a period of time every day and had free access to hay in the stable and despite being a thoroughbred seems a fairly relaxed character.

Initially, he seemed to settle in well and showed no signs of any problems. After about 6 weeks they noticed he was a bit quiet and his appetite had decreased. He was reluctant to eat his concentrate bucket feeds. He was still eating hay but not as much as before and he was looking a bit lean and was not passing as many droppings as usual.

On routine examination Keano was found to be slightly lean with poor top line muscle and condition. His temperature and gut sounds were all normal and he was showing no signs of colic pain. A routine blood sample did not show any abnormal findings and a faecal worm egg count was also clear. It was then arranged for Keano to have gastroscopy to investigate the possibility of gastric ulcers.

He was starved overnight in preparation for his examination and sedated to allow the 3m long camera endoscope to be passed down his oesphagus and into the stomach. All areas of his stomach lining were viewed and pictures recorded. In both the upper squamous part of the stomach lining and glandular mucosa part of the stomach several reddened areas of superficial ulceration were found and both areas were graded to be 2/4 gastric ulceration.

Keano was started on daily dosing with omeprazole (GastroGuard™) which effectively reduces the production of gastric acid in the stomach and three times daily dosing with sucralfate (Antepsin™) which helps to provide a protective barrier over the glandular ulcers. As soon as treatment was started, his owner Alison noticed a great improvement in his appetite - he enthusiastically finished his feeds and was eating much more hay. Treatment was continued for one month after which Keano has continued to have a good appetite and has gradually gained condition and is certainly feeling well - even recently jumping back into the yard when he felt the weather was a bit too cold and wet out in the field.

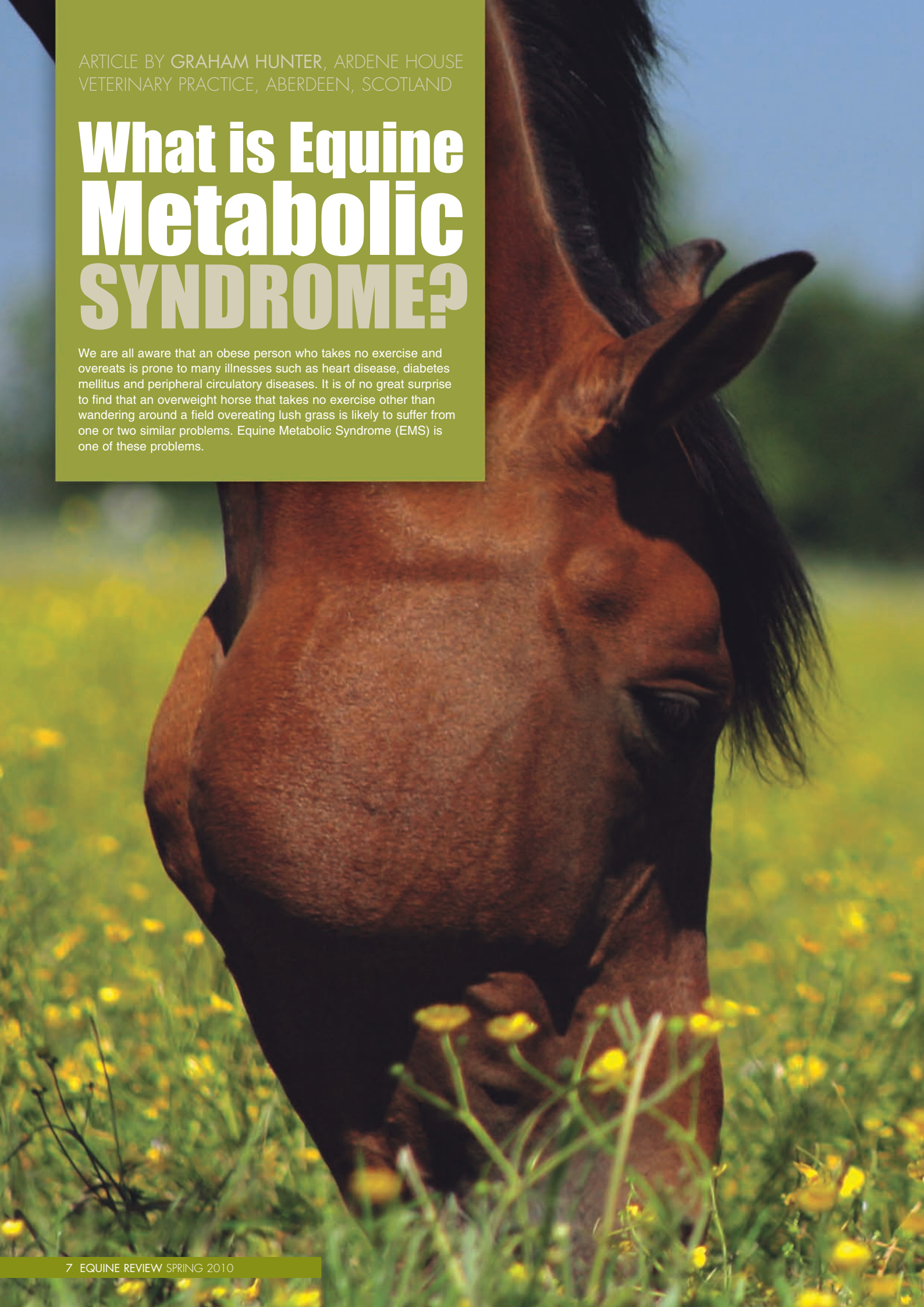
Although Keano already had a good management system with daily turn out, some management changes were able to be made to try to prevent the ulcers returning. He has free access to fibre in several haynets to encourage foraging. He is fed oil daily as part of his ration which can have a protective effect and he is given a small fibre meal prior to exercise which helps to provide a mat in the stomach to absorb the acid and prevent the acid splashing up into the sensitive part of his stomach.

Although Keano is a thoroughbred, his calm personality, and light workload might not immediately make him high risk for ulcers when compared with a racehorse in training. It is thought that perhaps the stress of moving home could have triggered the gastric ulceration. This case shows that ulcers can occur in different types of horses and that once treated the improvements can be dramatic.

ARTICLE BY **GRAHAM HUNTER**, ARDENE HOUSE VETERINARY PRACTICE, ABERDEEN, SCOTLAND

What is Equine Metabolic SYNDROME?

We are all aware that an obese person who takes no exercise and overeats is prone to many illnesses such as heart disease, diabetes mellitus and peripheral circulatory diseases. It is of no great surprise to find that an overweight horse that takes no exercise other than wandering around a field overeating lush grass is likely to suffer from one or two similar problems. Equine Metabolic Syndrome (EMS) is one of these problems.



ARTICLE BY **GRAHAM HUNTER**, ARDENE HOUSE VETERINARY PRACTICE, ABERDEEN

HORSES AND PONIES, particularly native breeds have developed a METABOLIC SYSTEM which enables them to survive the harsh outdoor winters with little food.

Graham Hunter

This system involves the laying down of fat deposits during the spring and summer when food is plentiful. This fat, particularly fat in the abdomen of the horse or pony does not just serve as an energy store but is also metabolically active and produces hormones called adipokines. Increased levels of these hormones result in increased levels of a steroid hormone called cortisol, which inhibits the effects of insulin. Insulin is involved in the uptake of glucose from the bloodstream and its storage in cells. If insulin is stopped from doing its job, the body reacts to this by producing more insulin. This phenomenon is called insulin resistance. This process is essentially a normal physiological and health sustaining survival trait. Problems such as laminitis occur when this mechanism fails to operate correctly with the normal seasonal changes.

Domestication of the horse has resulted in horses being fed more than adequately during the summer and winter months on improved pastures, good hay, haylage and high quality concentrate feeds. The result of this is that there is no real requirement for the valuable winter fuel saving insulin resistance system. This system remains permanently turned on resulting in many undesirable effects such as continually high circulating insulin and glucose levels. A very similar situation is seen in type 2 diabetes in humans. High circulating glucose levels are toxic to the cells lining all of the blood vessels. In man we see this resulting in cardiovascular disease. In the horse, this results in blood vessel problems in the feet and subsequently causing laminitis.

EMS is often referred to by other names. You may hear it referred to as peripheral Cushing's disease, pre-Cushing's disease, obesity-related-laminitis or even, more sinisterly, as equine syndrome X. All these names are relating to the same disease process. There is no real specific test for Equine Metabolic Syndrome so your vet will use a combination of medical history, clinical signs and supportive blood tests to diagnose the problem.

CLINICAL SIGNS OF EMS INCLUDE;

- Obesity (although occasionally seen in lean horses)
- Abnormal body fat distribution
- Unexplained and recurrent bouts of laminitis
- Altered reproductive function, (abnormal cycling in mares and infertility)
- Lethargy
- More frequent urination

It is very important that your vet makes the final diagnosis of EMS as they may need to rule out Cushing's disease and thyroid dysfunctions. These are different metabolic glandular diseases which can appear very similar to EMS.

Treatment of EMS is very similar to the treatment of obesity in people and is based on diet and exercise. As in people this takes a lot of discipline. The diet should consist of good quality hay, small amounts of high fibre concentrates, and a vitamin and mineral supplement. The amount of hay you should feed should be ideally 1- 1.5% of your horse or pony's ideal weight e.g. If your pony should be 200kg in weight, feed 2-3kg of dry hay. Do not guess at this weight. You must weigh the hay as you will be surprised how little it is. Absolutely no grass, haylage, apples or carrots should be fed. This sounds harsh but is essential for the success of treatment.

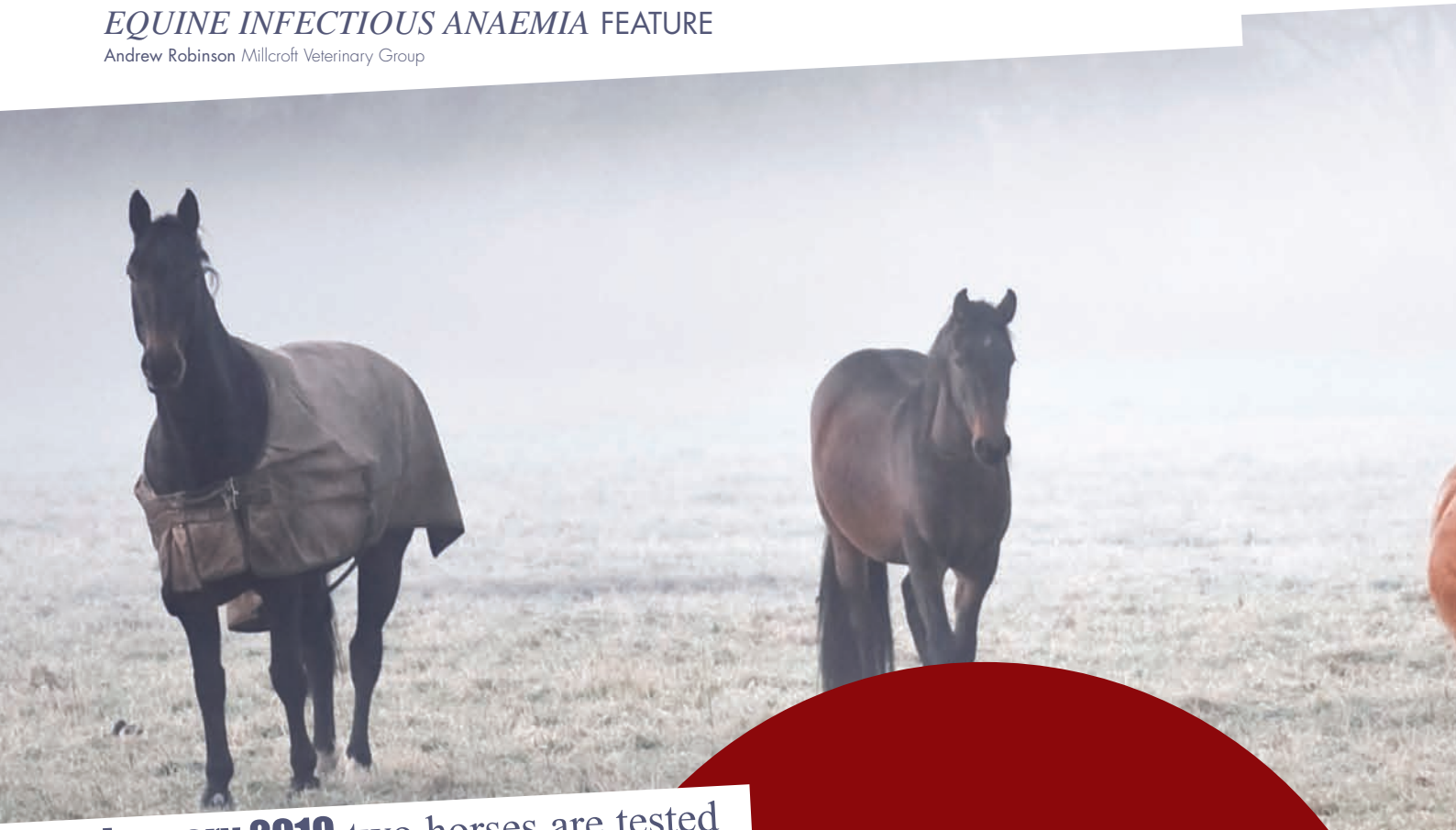
Exercise is essential as it aids weight reduction and improves glucose uptake into the muscles. If your horse or pony has laminitis, you must wait until this has been treated successfully before you start any exercise programme.

Drug therapy using Metformin is proving to be very successful in the treatment of EMS. Metformin is also used in treatment of human diabetes and is given orally to improve insulin sensitivity. Levothyroxine is used extensively in the United States for treating EMS as it is thought to accelerate weight loss and improve insulin sensitivity. It is unfortunately prohibitively expensive to use this drug in the UK.

The best treatment is of course prevention. Ensuring your horse or pony is not overweight is a great start. If you need help or advice on EMS, obesity, weight reduction or exercise programmes, please call your local equine vet.

‘Treatment of Equine Metabolic Syndrome is very similar to the treatment of obesity in people and is based on diet and exercise...’

Andrew Robinson Millcroft Veterinary Group



January 2010 two horses are tested positive for Equine Infectious Anaemia (EIA) in Wiltshire...

...SPECIAL REPORT

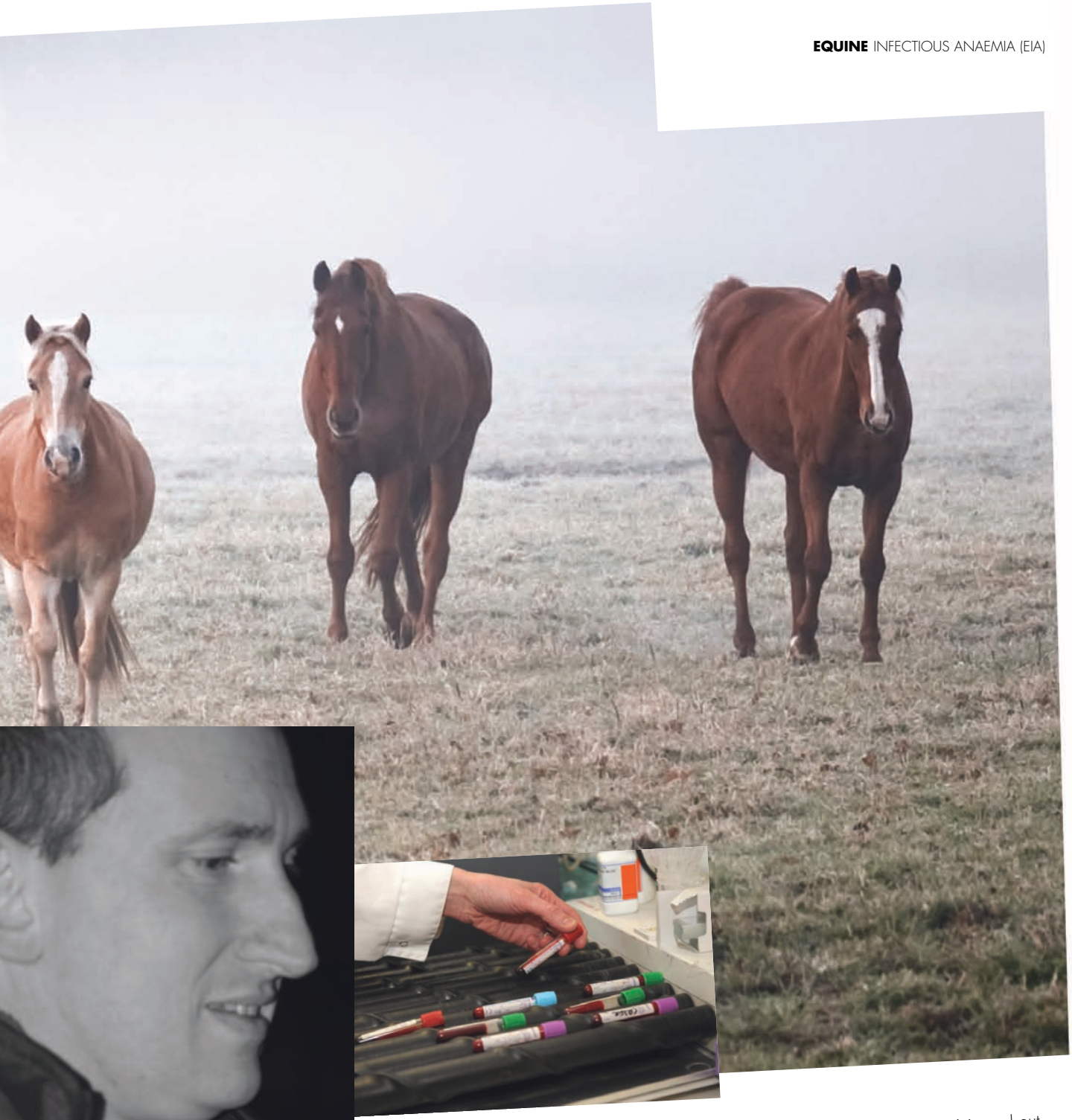
Equine Infectious Anaemia (EIA)

ANDREW ROBINSON Millcroft Veterinary Group

In January this year two horses tested positive for Equine Infectious Anaemia (EIA) in Wiltshire after being imported from Romania via Belgium. These were the first cases of this disease in Great Britain since 1976, although there was a serious outbreak in Ireland in 2006, and as it is a notifiable disease DEFRA took the decision to humanely destroy these animals. All horses that are imported are routinely blood tested for this disease, a procedure that has shown its importance in this scenario. Other equine notifiable diseases include African horse sickness, contagious equine metritis, equine viral arteritis, equine influenza and Glanders. If you suspect signs of any of the notifiable diseases, you must immediately notify your local Animal Health Office.

EIA is a viral disease caused by a lentivirus of the retrovirus family that is closely related to the one causing HIV in humans. However EIA is not zoonotic so does not affect humans. It does affect horses, donkeys and mules and attacks the animal's immune system with infected horses displaying a very variable set of clinical features. Acute, subacute, chronic and subclinical syndromes are recognised with the severity of the clinical signs dependent largely upon the virulence of the strain of virus, the dose of virus and the host response. The signs seen in the acute syndrome include intermittent fever, depression, anorexia, nose bleeds, anaemia, emaciation and in some cases death. However, the majority of horses recover from the viraemia and appear normal for several days or weeks and then experience recurrent episodes of fever and depression.

The frequency and severity of these clinical bouts of disease decreases with time and often the horse will stop demonstrating any clinical signs after about a year. These animals are then carriers for life with the potential to infect other horses through transmission by the exchange of blood via biting flies, especially stable flies (tabanids), blood products and through the placenta



Andrew Robinson

to the foetus or colostrum to the foal. As the biting flies particularly live in low-lying swampy areas the disease is also known as 'Swamp Fever'. In fact the disease has been identified on all of the continents. In Europe, it is most prevalent in the northern and central regions. Horses are most likely to become infected when travelling abroad to countries, or areas, where the disease is endemic, or from the use of biological products infected with the EIA virus.

Unfortunately as yet there is no successful treatment or vaccine available so if an owner has an animal that they are suspicious about they must notify their own vet or a vet in their local Animal Health Office (found on the DEFRA website) immediately. The suspected animal will be bloodtested and an agar gel immunodiffusion test (Coggins test) performed. If the horse is found to be positive it will be put to sleep to control the spread of the disease and ensure that the country remains EIA free and all equine animals in contact with it will be tested to ensure that they are not carriers. They will not be euthanased unless they are found to be carriers.

"EIA is a viral disease caused by a lentivirus of the retrovirus family that is closely related to the one causing HIV in humans..."

DR TERESA HOLLANDS
BSc(Hons), MSc(Nutrition), PhD, R.Nutr
DODSON & HORRELL LTD

FEEDING THE LAMINITIC HORSE

There have been massive steps forward in the study of laminitis in the last 10 years and what is becoming very clear is that there is more than one nutritional cause of laminitis, although the clinical signs might be the same.

Fact 1 **66% of laminitis** is pasture associated.

Fact 2 **Equine Metabolic Syndrome** is on the increase and with it associated laminitis.[2]

Fact 3 Until recently researchers thought that fructans found in grass affected the hind gut in a similar manner to an overload of starch detrimentally changing the fermentation in the hind gut. However recent work has shown that the fructans do not reach the hind gut but are fermented in the small intestine of the horse.[3, 4]

Fact 4 Laminitics have **3 times the levels** of free radicals compared with non laminitics.[5]

Fact 5 Horses and ponies with a fat score >3.7 (0-5 modified score) are at greater risk of laminitis and foot related problems.[6, 7]

Fact 6 It is likely that if a mare is on a diet deficient in protein, vitamins and minerals (suboptimum nutrition in utero) her foal will be born with **insulin resistance.**[8]

Fact 7 If fed in excess; high fat diets predispose a pony to insulin resistance more than high sugar diets.[10]

Fact 8 Ponies and horses with insulin resistance are at a higher risk of laminitis.[11]

Fact 9 Restricting a horse's dry matter intake increases the risk of stereotypy, colics and gastric ulcers.[12, 13, 14]

Fact 10 Exercise is protective against insulin resistance.[15]

Equine Metabolic Syndrome and Insulin resistance

Watching what you feed your horse or pony isn't enough on its own to minimise the risk of the life threatening disease of laminitis; you have to make lifestyle changes too… preventing laminitis is a way of life. In fact we now know that it isn't just what you feed today or tomorrow that increases the risk but what you have been feeding over a long period of time. Diabetes has recently been diagnosed in the horse[16] and Equine Metabolic Syndrome (EMS) is very similar to its human equivalent.

Feeding the laminitic

Dietary insult

If your horse has developed laminitis because he has had a dietary insult that has changed the fermentation in his hind gut (e.g. a very large meal of starch) or something that has caused endotoxaemia, then it is important that the correct gut flora is re-established and the dietary cause removed.

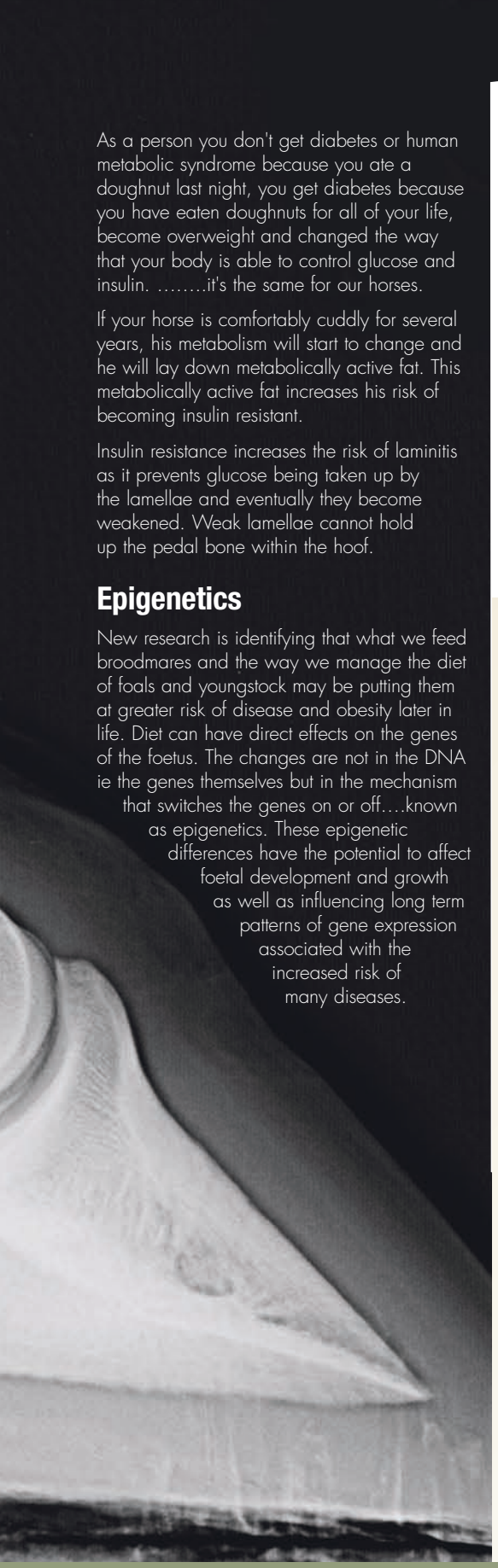
As a person you don't get diabetes or human metabolic syndrome because you ate a doughnut last night, you get diabetes because you have eaten doughnuts for all of your life, become overweight and changed the way that your body is able to control glucose and insulin. ……..it's the same for our horses.

If your horse is comfortably cuddly for several years, his metabolism will start to change and he will lay down metabolically active fat. This metabolically active fat increases his risk of becoming insulin resistant.

Insulin resistance increases the risk of laminitis as it prevents glucose being taken up by the lamellae and eventually they become weakened. Weak lamellae cannot hold up the pedal bone within the hoof.

Epigenetics

New research is identifying that what we feed broodmares and the way we manage the diet of foals and youngstock may be putting them at greater risk of disease and obesity later in life. Diet can have direct effects on the genes of the foetus. The changes are not in the DNA ie the genes themselves but in the mechanism that switches the genes on or off….known as epigenetics. These epigenetic differences have the potential to affect foetal development and growth as well as influencing long term patterns of gene expression associated with the increased risk of many diseases.



So for example if a mare is fed high calories and not enough vitamins and minerals or if she is on a restricted diet (low protein, vits and mins) known as suboptimum nutrition, then her foal is likely to be born with insulin resistance and therefore at greater risk of obesity and laminitis as a mature horse.

Metabolic cause

If your horse has been comfortably cuddly for a long time (possibly before you owned him) and he isn't eating starchy feed, then the reason that he has got laminitis is probably due to long term changes in the way his body handles insulin and sugar.

Thus for no apparent reason he suddenly seems to become susceptible when he has a little too much grass and puts on a little more weight. In this situation, there hasn't been an insult to his digestive system, so it takes longer to resolve this and the aim is to reduce his body fat and insulin resistance.

Short term

- Feed hay soaked for 12hrs to provide bulk but reduced calories
- Balance his diet especially in terms of vitamins and minerals and protein
- Provide a feed that contains antioxidants
- Add 3 tablespoons of cod liver oil to his feed.

Long term

You must get his body fat down to below fat score 3 (0-5 modified score).

Long term tips to minimise the risk of laminitis

1. Feed according to workload, a horse in light work or at maintenance doesn't need lots of calories (energy). They will put on fat if their calorie (energy) intake exceeds their calorie use.
2. Fat score your horse fortnightly and keep him at <3.7 during the spring and summer.
3. Remember that our horses evolved to put on fat through the spring and summer BUT they lost it through the winter. They were the original yo-yo dieters!
4. If he isn't doing much work in the winter, then don't worry if he goes down to fat score 2.5. If he loses muscle he will get a 'weak outline' don't try to improve his outline by making him fat; wait till the spring when you can ride him more and build up his outline through building muscle.
5. Try to ensure that your horse gets a minimum of ½hr active walking per day. His heart rate should be 80 bpm, whilst he is doing active walk; this can be checked with a heart rate monitor.
6. If he has put on fat in the summer, then make the most of the winter to lose his fat. Use a lighter weight rug, so that he burns off some of his fat keeping warm.
7. Don't cut back on his bulk. Horses need bulk to maintain a healthy digestive system to reduce the risk of colics; to produce saliva whilst they chew to minimise the risk of gastric ulcers; to provide occupational therapy to minimise the development of oral stereotypies.
8. Cut back his calories by soaking hay for 12hrs which reduces the sugar/calorie content[17]. Make sure that you feed enough to meet his dry matter requirements (2.5% of his bodyweight).

   Oat or barley straw are useful low calorie bulk forages.
9. Make sure that the diet is balanced in terms of vitamins, minerals and protein throughout life. Remember suboptimum nutrition of the mare is likely to result in foals being born with insulin resistance.
10. Monitor his grass intake. Our research has shown that some horses can eat 5% of their bodyweight as grass[18], gaining 21kg in a week, (4% of their bodyweight). Grass MUST NOT be considered 'fresh air'.
11. Consider a muzzle, increase the number of horses in the field or cut grass weekly/twice weekly to control the amount they can eat.
12. If you are restricting your horse's grass intake then feed him a low calorie, high fibre feed that is balanced in vitamins and minerals to extend the amount of time he is chewing. These are usually formulated to be fed at 500g/100kg BW and should contain extra antioxidants. e.g. Safe and Sound.
13. If your horse has plenty of low calorie fibre, then ultimately you must balance his diet by feeding a low intake, low calorie, vitamin, mineral and antioxidant balancer; usually formulated to be fed at 100g/100kg BW. e.g. Ultimate Balancer.
14. Remember a fat horse is in poor condition as he isn't fit for purpose.

- Discuss with your vet if a bran mash is appropriate to wipe out the bad bacteria from the hind gut
- Re-establish gut flora. Yeast improves hind gut fermentation and probiotics help re-establish the front end of the gut
- Provide B vitamins, eg B -Sure making sure that they don't contain high levels of copper or iron as often the liver is stressed trying to remove the toxins that have leaked from the hind gut
- Feed a high fibre feed to help re-establish the friendly bacteria in the hind gut and to keep your horse chewing whilst he is stabled
- Check he is getting enough antioxidants to reduce the adverse effects of the inflammation and damage
- Make sure he has water, at floor level if he is lying down a lot
- Feed hay on the floor, so he can nibble if he is lying down

pony pages

Welcome...

TO THE SPRING 2010
XLVETS PONY PAGES

winner

Competition winners...

CONGRATULATIONS TO...
COMPETITION 2 WINNERS

Alnorthumbria Veterinary Group Winner:
Abigail Charleton

Pictured above Lesley Barwise-Munro presenting Abigail with her prize, by coincidence - on Abigail's birthday!

Larkmead Veterinary Group Winner:
Florence & Amelia Dighton

Pictured below is Florence, riding Hector and on the right is Amelia, riding Solo.

Top Tips

...for preventing Laminitis

- Exercise your pony regularly.
- Do not allow your pony to become overweight - go through our nutrition article with your mum, dad or instructor.
- Ask your vet at annual vaccine for dental check if they think your pony is overweight.
- Avoid lush grass (look out especially in spring and autumn).
- Avoid frosty grass.
- Feed a well balanced diet with plenty of fibre.
- Feed a recommended vitamin and mineral supplement.
- Avoid sudden diet changes.
- Ensure feet trimming every 6 to 8 weeks, maybe more often if your pony is prone to laminitis.

Fact!

A horse has approximately 205 bones

Competition winners...

WINTER 09/10

608 Veterinary Group:
Josh Morland
Calweton Veterinary Centre:
Julie Bolt
Scarsdale Veterinary Group:
Lucy Wall
Paragon Veterinary Group:
Daisy Holden
Ardene House Veterinary Hospital:
Jenna Thomson

winne

www.xlvets.co.uk

Competition page

ENTER TODAY
GOOD LUCK...

Welcome
XLVets Competition

All of the words listed below can be found in the grid with the exception of one. **Which one is it?** Circle all the words as you find them, there will be one word which isn't in the grid. Write this word on the competition entry form and send it back to us for **YOUR CHANCE TO WIN.**

G	D	A	T	H	B	S	S	T	R	E	V	M	Y	G
N	L	I	H	I	T	E	N	A	S	A	E	T	I	O
I	A	U	T	A	V	R	L	F	I	L	A	O	F	A
M	B	I	V	O	N	L	I	R	T	R	S	R	A	R
O	E	H	O	E	O	M	H	G	I	T	T	T	R	A
O	I	H	L	C	N	L	U	I	N	I	A	T	P	R
R	P	D	D	H	O	A	O	N	I	P	B	D	A	A
G	R	A	L	R	S	T	M	G	M	E	L	O	P	T
W	E	E	P	F	E	Y	C	I	A	T	E	T	L	E
H	O	K	E	T	B	E	T	S	L	A	I	E	U	E
E	E	R	A	S	A	H	E	U	E	R	O	F	C	H
A	I	R	M	O	N	E	Q	U	I	N	E	A	A	M
F	H	N	A	E	D	R	N	N	A	N	R	R	A	H
O	D	T	A	N	R	F	G	T	O	T	R	E	L	C
Y	E	I	T	I	A	P	S	N	E	S	Y	G	U	R

LAMINITIS
EQUINE
MANE
HOOVES
NOSEBAND
HEADCOLLAR
PIEBALD
GROOMING
FOAL
SHETLAND
STABLE
BIT
NUMNAH
GIRTH
WORMER

Which one is missing!!!
Fill in your answer below

WIN an Equine Accessories Kit
This kit contains one each of the following: ProTack grooming box large, Bitz tail bandage 3 purple, ProStable haylage haynet large purple, ProTack lunge line black/purple, ProTack headcollar cob baby pink 'superstar', ProTack lead rope trigger hook baby pink, Bitz folding hoof pick, Bitz hoof oil brush with cap purple, Bitz curry comb metal large, Bitz plaiting bands white x 500, Bitz curry comb plastic large purple, Bitz shedding blade, Bitz sponge with teeth large, Bitz sweat scraper purple.

WIN!

A winner will be chosen from all the correct entries received before the closing date, **Friday 28th May 2010.** Winners will be revealed in the next issue of Equine Review. The editors decision is final, no correspondence will be entered into.

MISSING WORD _____

Send your completed entry to: Equine Review Competition No.4
XLVets, Carlisle House, Townhead Road, Dalston, Carlisle, CA5 7JF

Name _____

Address _____

_____

Postcode _____

Daytime Telephone Number _____

Email _____

XLVets Practice Name _____

☐ I do not wish to receive further information from XLVets

☐ I would like to receive further information from XLVets by e-mail

XLVets

Excellence in Practice

For further Equine Information, please contact your local XLVets Practice.

www.xlvets.co.uk