



## A GUIDE TO:

# EQUINE METABOLIC SYNDROME



Professional



Caring

## WHAT IS EQUINE METABOLIC SYNDROME?

Equine Metabolic Syndrome (EMS) can occur in horses or ponies of any age, but is most common in native breeds. A mixture of genetic and environmental factors combine to predispose horses or ponies to weight gain, and insulin resistance.

Horses with equine metabolic syndrome can get certain 'classic' areas of fat, such as the crest of their neck, over the shoulders and on the rump, although not all horses with the condition match the description.

## WHAT CAUSES EMS?

It is thought that increased bodily fat causes the insulin resistance, which in turn stops the animals from metabolising sugar and starch properly. This then causes an excess of insulin in the blood stream, leading to an increased risk of laminitis. This condition goes hand in hand with laminitis caused by fresh grass, as it is the sugar and starch in the grass that leads to problems.

## CLINICAL SIGNS

- Recurrent laminitis
- Lethargy
- Overweight and difficulty keeping weight down
- Presence of regional fat pads – these can be present on horses that are not visibly overweight, notably near the eyes, the crest of the neck, and the rump
- Increased drinking
- Increased urination



## DID YOU KNOW?

*Insulin controls the glucose levels in the blood. When Insulin resistance occurs the relationship between glucose and Insulin is changed*



# TREATMENT AND PREVENTION



## HOW IS EMS DIAGNOSED?

While often there is a clinical suspicion of EMS based on the appearance of the horse or pony, a blood test can prove useful to measure various factors to aid in the diagnosis. A basal Insulin is most commonly taken, and if there is any doubt a stimulation test can be performed by means of administering Karo Syrup prior to the blood being taken. Your vet will be able provide the syrup and explain the process beforehand. Other factors measured on the bloods can include Glucose, and Adiponectin (a fat hormone which decreases in the present of EMS). The sample is then sent for testing to confirm the diagnosis of EMS. Repeat samples can then be used to monitor for improvement or increased risk.

## HOW TO TREAT EMS?

It is important to remember that EMS is a potentially reversible condition, provided that permanent management changes are implicated. The most important aspect of treating EMS is diet and exercise. Your vet will be able to advise you an appropriate plan following the diagnosis of your horse. There are medications available to help treat EMS which your vet can prescribe if suitable.

### DIET

- Low in soluble sugars and starches.
- Access to pasture should be limited and avoided when the grass is lush and growing. Some horses with EMS may not be able to tolerate any access to pasture.
- If you are feeding soaked hay it is advised to feed a low- calorie balancer to ensure your horse still gets all their essential vitamins and minerals.

### EXERCISE

Where possible (laminitis permitting) your horse should be exercised daily. This can be done via ridden work, lunging, in-hand walking, swimming or on a water treadmill.



*For more information on feeding ask a copy of our 'Guide To Feeding An Overweight Horse'*