



## Equine Metabolic Syndrome

### What is it?

The combination of:

- Regional adiposities: fatty deposits around the tail head, behind the shoulder and the crest of the neck.
- Insulin resistance: the inability of insulin to take glucose from the blood stream into the cells
- Laminitis: inflammation of the attachment between the pedal bone and the hoof wall

### What does a horse with Equine Metabolic Syndrome look like?

- Presence of regional adiposities
- Maybe over weight (> body condition score 7 of 9) however not always
- Sore footed or prone to laminitis



### How can we diagnose Equine Metabolic Syndrome?

If the horse has the above signs, an oral sugar test can be performed. This involves sampling blood for insulin and glucose after the horse has been fasted overnight.

A second blood sample is taken after the horse has been fed a high glucose meal. The results of the pre and post glucose feed are compared and the effectiveness of insulin is assessed

### What is the treatment?

Dietary management is the most effective treatment. As the insulin cannot transport glucose, feeds high in sugar should be avoided. This includes grain, molasses, green grass etc. Drugs such as Metformin and Levo-thyroxine have been used to help sensitise insulin with mixed results

### How to manage a horse with Equine Metabolic Syndrome?

- Alter the diet as above
- Work with your veterinarian and farrier, along with x-rays of all 4 feet to determine a therapeutic shoeing plan
- Once the laminitis has stabilised, controlled exercise can encourage insulin sensitisation
- Reduce the access to sugars in the diet

