



EQUINE REPRODUCTION SVC

Equine Reproduction Embryo Recovery Embryo Transfer

*ERS is the longest, continually in
existence*

*Equine Embryo Transfer Company
in the United States*

Do Current EMS Treatments Work?

The warnings aren't new to many owners: Having an overweight or obese horse means more than just harboring a nutritional overachiever. Overweight horses are at risk of developing several dangerous health conditions, including equine metabolic syndrome (EMS), which in turn can lead to laminitis and insulin resistance.

Nevertheless, the number of obese horses in developed nations continues to rise. Weight loss is known to be a key factor in abolishing EMS and improving horses' health and longevity, but achieving it seems easier said than done.

"In a research setting, both diet and exercise help horses with EMS, resulting in significant changes in body weight and insulin and glucose dynamics," said Cathy McGowan, BVSc, MACVSc, PhD, DEIM, Dipl. ECEIM, FHEA, MRCVS, professor of equine internal medicine at the University of Liverpool's School of Veterinary Science, in England.

However, many humans find weight loss (in themselves as well as in their four-legged charges) difficult to achieve.

McGowan said owners can find success if they apply current treatment recommendations for EMS, but only with sufficient veterinary support and advice.

In a recent study, she and colleagues recruited 19 client-owned horses and ponies diagnosed with EMS. All animals were managed primarily by their owners at home but met with equine veterinarians two to five times during the study period (which ranged from three to six months, depending on the horse) to monitor success. The study horses showed weight improvements within 35 to 605 days, with an average of 161 days.

Based on what they learned from the study horses and their owners, the team made the following recommendations:

- Restrict and manage grazing carefully. Horses and ponies can still be turned out on well-grazed-down pastures, particularly if wearing properly fitting grazing muzzles. In some cases, however, owners must restrict turnout to drylots or even eliminate it for a short time until the horses' insulin responses improve.
- Achieve metabolically significant weight loss (that which results in improved insulin sensitivity and insulin and glucose dynamics) by decreasing forage intake to 1.5% of body weight during a veterinarian-monitored period of weight loss. Horses normally consume 2 to 2.5% when given free rein, and some ponies consume up to 5% of their body weight per day when fed *ad libitum*.
- Soak hay before feeding to reduce the nonstructural carbohydrate (NSC) content. Excessive NSCs in EMS equids produce an exaggerated hyperinsulinaemic response to feeding which, in turn, increases the risk of laminitis.
- Have your forage analyzed, especially when not soaking hay. This will ensure NSC content is low and indicate if extra protein or vitamins/minerals are needed.
- Eliminate treats and supplementary feeds from the horse's diet, including carrots. The exception to this comes if the horse's hay does not meet his dietary needs, at which point a low-calorie ration balancer (or similar product) or a vitamin and mineral supplement could be useful when fed at the recommended rates.
- Learn to properly use a weight tape and body condition score chart to monitor success.
- Have your veterinarian devise exercise regimes based on current work, intended use, and current hoof health.
- Maintain good farriery for hoof health.

"The same barrier to lifestyle changes and weight loss that humans experience is also applicable to owners of obese equids," McGowan concluded. "But with proper veterinary support, owners can help horses lose weight and enjoy the benefits of insulin sensitivity, such as a decreased risk of laminitis."

The study, "Treatment of equine metabolic syndrome: a clinical case series," is scheduled to be published in upcoming edition of the *Equine Veterinary Journal*.

*** CLICK HERE ***

Current Articles &
Research

Reproduction
Foil Disorders
Lameness

Check back often for
new additions