

EQUINE METABOLIC SYNDROME, ALSO KNOWN AS “PERIPHERAL CUSHINGS SYNDROME”

What is Equine Metabolic Syndrome (EMS)?

By definition, it is the combination of obesity, metabolism/ hormone disruption, and slow onset laminitis. EMS is most commonly associated with pony breeds, Arabians, Quarter horses, Saddlebreds, Tennessee Walking horses Thoroughbreds and Warmbloods. These horses are typically called your “easy keepers” and don’t require much more than air to get fat on. Most horses start developing obesity around 3-4yrs of age, but may not encounter any problems until their early teens.

What are the clinical signs?

- Obesity
- Regional fat deposits i.e. cresty neck, fat deposit along the tail head and sheath
- Insidious (slow) onset of laminitis

Why are some horses more predisposed?

It appears to be a combination of genetics and environmental factors.

After an extended period of time of being obese horses will develop Insulin Resistance (IR), meaning they behave hormonally similar to a diabetic human except without such severely high blood sugar levels. IR is associated with inflammation throughout the body and is correlated with the development of laminitis.

How do we diagnose EMS?

- Measuring insulin and blood glucose levels(both are high)
- Thyroid concentrations(low)

How do we treat / manage EMS?

- Exercise if laminitis isn’t a limiting factor
- Feed a low starch / low sugar feed
 - o Purina Mills *Wellsolve L/S*
 - o Triple Crown *Low Starch* or *Light*
 - o Buckeye *Safe n’ Easy*
 - o Seminole *Wellness*
 - o Nutrena *Safe Choice*
- Limit the amount of grazing when the grass is changing
 - o Lush spring grass
 - o First drought
 - o After a heavy summer rain
 - o Going into winter
- Utilizing a grazing muzzle or allow them to graze 1-2 hrs per day when the grass is going through a dynamic phase
- If diet and exercise aren’t proving to be enough, levothyroxine therapy (thyroid supplementation) can encourage weight loss and improve insulin sensitivity.