

Equine Metabolic Syndrome

Some of you may have horses that are, shall we say, “pleasantly plump” or “easy keepers”. This type of horse is one that is metabolically efficient and can do significantly well on pasture alone. If so, they may be at risk of developing or already having a condition known as Equine Metabolic Syndrome (EMS). Horses with EMS typically have metabolic and hormonal disturbances which are characterized by obesity, regional adiposity (fat deposits), insulin resistance and laminitis (founder). When a horse has insulin resistance, this essentially means that normal concentrations of insulin, a hormone that under normal conditions helps to facilitate the uptake of glucose (sugar) from the blood by muscle, liver fat and other tissues, fails to cause this uptake. The pancreas, which is responsible for producing insulin, will compensate by secreting higher and higher levels of insulin to keep blood sugar levels within normal ranges thereby causing blood insulin concentrations to be abnormally high. EMS can be more commonly seen in ponies or other breeds such as Morgans, Paso Finos, Spanish Mustangs, or even some certain warm blood breeds. This doesn’t mean however that a Quarter Horse or other “stock breed” cannot be affected. EMS is often observed in horses that are between 5 to 15 years old.

Increased levels of blood insulin is detrimental to the health of the horse leading to a “cresty neck” (abnormal fat deposits) and fat pads near the tailhead, close to the mammary gland and in the sheath. Some horses will even have these fat deposits develop above the eyes. These horses tend to exhibit a high prevalence of chronic, recurrent laminitis which tends to be the most debilitating part of EMS and could lead to a permanently cripple a horse

There is not a specific medical treatment for EMS. We primarily have to make management changes not only to a horse’s diet, but also to their exercise routines. Contrary to what most people think, a large percentage of horses which are older, inactive, and can be maintained a pasture or hay only, do not require supplementation with grain or other concentrates to help them maintain a healthy body weight. Horses with EMS, especially those with laminitis should have very limited if any access to pasture. These horses are typically maintained on a balanced, rationed, forage based diet that does not include any grain or other concentrates. Regular exercise programs involving daily or every other day exercise such as hand walking, lounging, or even ponying need to also be initiated. If the horse is affected by laminitis, the dietary changes should be made but exercise programs should not begin until your horse is over the current laminitic episode and then an exercise regimen can be slowly instituted.

If you have a horse that is “pleasantly plump” or is an “easy keeper”, they are at risk. It is important to start reducing their overall caloric intake, stop feeding grain, and institute an exercise program. If your horse is overweight and has developed laminitis, or had laminitis in the past, they should be examined and have blood work performed to help diagnose whether or not EMS or insulin resistance is the source of the problem. With early diagnosis, the overall health and well being of these horses can be improved by instituting lifestyle changes and adjusting their diet to hopefully avert the chances of developing laminitis.

If you have a horse that you believe may have EMS or showing any of the signs described above, it is important to call and schedule a consult. The continued health and well being of your horse may depend on it.

