

## Overweight Horses Face Multiple Health Risks

### What's the definition of an overweight horse?

Tiny miniature horses...massive draft breeds...porky Shetlands...ribby, slab-sided seniors. Equines come in many shapes and sizes, but regardless of appearance, if a horse is carrying more weight than optimum, he or she is at risk for a number of serious health problems. In general, any equine with a body condition score of 6 or 7 may be described as overweight, while those scoring 8 or 9 are considered to be obese (excessively fat).

### Condition score? What does that mean?

In condition scoring, a numeric value from 1 (extremely thin) to 9 (extremely fat) is assigned to a horse based on visual and hands-on evaluations of physical characteristics. The score is determined by factors such as whether the ribs are visible, can be felt, or are covered by a thick padding of fat, and whether the spine protrudes above the back, is level with the flesh, or lies in a crease surrounded by fat deposits. A score of 5 generally denotes a horse carrying an optimum body weight.

### How many U.S. horses fall into the overweight and obese categories?

In an owner-reported survey conducted by the National Animal Health Monitoring System (NAHMS) in 1998, the prevalence of overweight horses was reported as around 5%. However, in a recent study conducted by the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM) and the College of Agriculture & Life Sciences at Virginia Tech, 300 horses were examined between June and August of 2006. Of these, more than half (51%) were determined to be overweight or obese.

### What problems are associated with obesity?

Dr. Scott Pleasant, associate professor in the department of large animal clinical sciences at VMRCVM, says obesity has become a major health concern in horses due to its association with chronic illness. Horses that are overweight are often plagued by chronic laminitis, oxidative stress, and less than perfect interaction between insulin and blood glucose. While obesity itself may not directly cause these problems, it certainly has some relationship to the metabolic processes that keep body tissues and systems healthy. Also, there's no question that excess weight leads to heat stress, strain on joints and connective tissues, and reduced levels of performance.

### How do horses become too heavy?

While the 1998 NAHMS study tended to blame overfeeding of grain, the VMRCVM researchers determined that most overweight horses in their sample population ate mostly pasture forage and hay, with few consuming a significant amount of concentrates. Pleasant said a partial explanation may be that many horses graze pasture forage plants that have been selected with the goal of improving weight gain in cattle and other food animals. Unlimited access to rich pasture, combined with the fact that many horses get little or no regular exercise, could lead to a pattern of steady weight gain.

## **What can be done to prevent equine obesity?**

The simple answer is to monitor your horse's body weight and condition on a regular basis, decreasing caloric intake and increasing exercise before the horse becomes severely overweight. Few horse owners have access to an equine scale, but an equine weight tape (available at many tack or feed stores) can help track weight gains and losses. Remember that it's not necessary to know your horse's precise weight to the last ounce; you need to be aware of trends and changes, and take action before weight gain gets out of control.

This basic answer, while essentially correct, leaves out the fact that horses have different metabolic patterns varying by breed, age, and other factors. Easy keepers seem to "get fat on the smell of an oily rag," while hard keepers might always look too thin, even though they are offered enormous amounts of feed. Owners of chunky, cresty horses need to pay extremely close attention to avoid allowing their horses to become too heavy. Learn the condition scoring system and score each horse once a month.

## **Okay, so I agree my horse is already too fat. What can I do to fix the situation?**

As stated above, the simple answer is to decrease energy intake and increase energy expenditure. If the horse is eating grain, consider reducing the amount or even cutting out grain entirely, possibly switching to a low-calorie vitamin-mineral pellet if you're concerned about providing complete nutrition. You can also switch from a legume hay to a grass hay, and move away from free-choice hay consumption by offering a daily hay ration equal to 1-2% of the horse's body weight. Pasture time can be limited by use of a grazing muzzle, a dry lot, or some hours in a stall or indoor arena. Make any changes to amount or type of feed very gradually over a period of several weeks. Use a scale or weight tape weekly, recording numbers to see if you're on the right track.

At the same time that feed is being decreased, a gradual increase of exercise should be instituted as the horse can tolerate it. Remember to start very slowly and build up the frequency, duration, and intensity of exercise as the weeks and months go by. Too much work too soon will make your horse stiff and sore at best; at worst, a fast start may result in stress fractures, bowed tendons, or other serious injuries.

For animals with chronic laminitis, those that are out of athletic condition, and horses with arthritis or other soundness issues, adding exercise may be challenging or impossible, another reason that avoiding obesity is a far better option than slimming down a chubby charger. To avoid causing more harm than good, enlist the help of your veterinarian to work out the best method for safe, steady weight loss.

## **Are there any horses that should have a condition score higher than 5?**

Broodmares have a different job description than most other horses, and their body condition must stay in line with these unique demands. Mares that are too thin don't conceive as readily as those that come into breeding season a little heavier. This doesn't mean your mare should be allowed to get extremely fat, but aiming for broodmare condition scores of 5 to 6 at the start of breeding season can be expected to result in increased conception rates.

## **What research is being done on overweight horses?**

Besides the VMRCVM study, another project is getting underway at the University of Tennessee. The UT team is asking for donations of overweight, cresty, and/or laminitic horses for an insulin resistance study led by Dr. Nicholas Frank. For more information, go to [www.vet.utk.edu/cemr/donations](http://www.vet.utk.edu/cemr/donations), or e-mail Dr. Frank at [nfrank@utk.edu](mailto:nfrank@utk.edu), or call Sarah at 865-974-5701.