

Story by: Barbara Sheridan

It's odd how two people can look at the same horse and view it with a different eye. One person may regard a horse as fat, but to the other it may appear to be just right. One might describe a horse to be quite "ribby", but in the eyes of another, it appears lean and fit. While it's customary for some horse owners to "eyeball" their horses to determine its ideal weight, this just leaves room for error, which can seriously affect its health. Instead, there is a better way.



Healthy Horse -Owners should manage their horses to keep them in the optimal range of 4-7

Since the mid-1980's, veterinarians and equine nutritionists alike have employed a system to measure fat coverage in horses with a scientific process called Body Condition Scoring as a more objective way to assess a horse's weight. Developed by Don Henneke, Ph.D. during his graduate study at Texas A & M University in 1979, Body Condition Scoring for Horses (BSC) was designed as a ranking system and remains the most reliable tool in determining a horse's body condition. If done on a regular basis, it is an excellent way to monitor the nutritional wellbeing of your horse over time.

The Henneke Scoring System

BCS is a numbering system that uses a scale of 1 through 9 to describe the amount of fat and muscle a horse is carrying. A score of 1 is considered to be a poor or emaciated horse with no body fat, while a 9 is extremely fat or obese. Application of this method assists in evaluating a horse's body condition no matter the breed, age, body type or sex.

"The 1 to 9 scale is scientifically published and accepted, and has been in use for many years since Dr. Henneke developed it," says Gayle Ecker, director of Equine Guelph at the University of Guelph. "However, this body condition score method is not a subject that is common knowledge. While it is generally included in most courses on horse care and nutrition, there are many horse owners that have not been exposed to this system of assessment and fewer still that have had structured training on it."



Ecker goes on to add, "Many may not be aware of the value of this scientific tool, and there are some who feel they can quite adequately eyeball the horse. Proper training for this [Henneke BCS] hands-on technique is important for its consistent use."

Through the use of physical palpation (use of hands to feel for areas of fat coverage) and visual assessment of anatomical sites, six specific areas of the horse's body are assessed – neck, withers, loin, tail head, ribs and shoulder. The scores are then totaled up and divided by six to obtain a more accurate score. The resulting number would be the horse's rating on the Henneke Body Scoring Condition Chart.

The 2013 Code of Practice for the Care and Handling of Equines recommends BCS as a tool for determining if an animal is too thin, too fat or in ideal condition and provides information on each individual score from 1 to 9. According to the Code, a BCS of 4 to 6 is recommended for most horses, miniature horses and ponies. However, this rating would be dependent upon the animal's purpose, breed and life stage. The Code is also now being utilized by the OSPCA in assessing potential equine welfare cases.

The Difference between Weight and Condition

In the past, some horse owners have applied other options to keep tabs on their horse's weight through the use of portable scales, which are costly, and weight taping. However, these methods just provide a measurement of the horse's body weight, not its condition. In addition, depending on how the tape is applied in the heart girth area, weight tapes can be very inaccurate.

Ecker notes that weight alone does not give us enough information, as a fat horse and a well-muscled horse can be of the same weight, but as in humans, muscle weighs more than fat. Instead, applying the BCS technique of examining the six areas where fat is deposited on a horse's body will help determine the body condition score in order to assist with the horse's overall nutrient requirements.



Fat Horse - Many people do not realize that horses at the other end of the scale (BCS 8-9) are also in need of intervention to get them back on the path of a health.



"Weight determination is important for feeding according to weight and growth, and for specific medications that are administered by the vet relative to the weight of the horse," Ecker says. "However, weight alone does not even come close to telling the story of nutritional balance. If we had two growing boys that both weighed the same weight, what would that tell us? One could be very tall and slim and the other could be very short and carry more weight than is advisable, but both weigh the same."

When measuring a horse's condition in order to maintain an ideal BCS, Henderson notes that this practice should be done on a regular basis. "The general rule is that what you see today is what you fed two to four weeks ago," says Dr. Brianne Henderson, who specializes in ambulatory horse sport medicine and emergency and critical care at Toronto Equine Hospital. "For that reason, I recommend horses that are healthy and in good work be assessed once per month through the BCS method. If you are trying to make a change, either weight gain or loss, then the horse should be assessed every other week."

A graduate of the Royal (Dick) School of Veterinary Studies in Edinburgh, Scotland, Henderson also furthered her trained as a hospital intern at Rood and Riddle Equine Hospital in Lexington, Kentucky. Most recently, she was the Assistant Team Veterinarian for Team Canada at the World Equestrian Games in Lexington. She points out that in addition to careful record keeping, documenting with photographs of your horse is also an immense help when trying to make a change in body weight and condition. "It gives you a concrete visual to compare to when you are three to six months down the road."

Too Fat or Too Thin?

Once a person becomes properly trained with Henneke's 1 to 9 scoring system, determining optimal body condition can be simple no matter the horse's age or breed. "Breed cannot be used to justify a skinny horse or fat horse, as the system is designed to look at fat cover, and this is irrespective of age or breed," Ecker says. "There is a healthy range of scores from 4 to 7, and where your horse falls within that narrow margin can be different depending on the use of the horse. For example, a broodmare going into the winter can be a 7, as this will help keep up her body weight during the cold of the winter. However, an athletic horse should be a 4 or 5, as it is not desirable for that horse to be carrying excess weight when they are running, jumping, turning, and more, as this extra weight puts more stress on the joints, ligaments and tendons."



While a horse rated 1-3 on the Henneke scale is too thin or dangerously thin and easy to spot as a case you would report to the SPCA for a possible neglect scenario, many horse owners have difficulty acknowledging that their horse is also at risk should it rate at the other end of the scale with an 8 or 9.

"Much the same as in people, viewing obesity as a disease in



Thin horse -Horses that are too thin (BCS of 1-3) are in obvious need of intervention for health and nutrition management.

horses is a more recent revelation," notes Henderson. "With the amount of current research being focused on the impact of fat cells on the hormones and metabolism of animals, specifically insulin resistance and equine metabolic syndrome, we must start to manage our horses in a manner which ensures their longevity and reduces the risk of colic, laminitis and orthopedic disease worsened by a high body condition."

She notes that there is a strong association between feeding good food as a demonstration of love and status, and as a result, Equine Metabolic Syndrome (insulin resistance) is becoming more commonly diagnosed amongst our horse population.

"The cresty necks and chronic laminitis associated with this disease can be hugely detrimental to a horse's athletic career and general welfare," says Henderson. "What we must remember is that the original horse survived on the poor quality pasture of Mongolia. This is what their system is designed for. While the elite athlete and geriatric will require additional nutritional support, the majority of backyards horses would likely do better with a diet higher in plain forage than concentrates."

A horse that is too thin or too fat is prone to colic, illness and disease. By understanding your horse's body condition through the use of Henneke's Body Condition Scoring, you'll be in a better position to prevent any problems that may arise.

"If you are concerned about your horse's body condition, consult your regular veterinarian to ensure that all other systems are in working order such as teeth, parasite load, and hoof balance," states Henderson. "They will be able to help you make a plan for any safe weight loss or agin."



The Code of Practice for the Care and Handling of Equines, which includes Henneke's Body Condition Scoring system, can be viewed or downloaded at: http://www.nfacc.ca/codes-of-practice/equine.

Equine Guelph is the horse owners' and care givers' Centre at the University of Guelph. It is a unique partnership dedicated to the health and well-being of horses, supported and overseen by equine industry groups. Equine Guelph is the epicentre for academia, industry and government – for the good of the equine industry as a whole.

For further information, visit **EquineGuelph.ca**.